DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

Gerald Vincent
(CESPK-PM-M)

Carolyn Tatoian-Cain
Senior Hazardous Substances Scientist
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200

8 December 2013

Re: No Department of Defense Actions Indicated (NDAI) at Former Hunters Point Shipyard Annex, San Francisco, California, FUDS Number J09CA1033, FUDSMIS Project: 01 –HTRW, 02 – CON/HTRW, 03 –CON/HTRW

From 1867 to 1939, Hunters Point was used as a commercial shipping port, dry dock, ship repair facility, and shrimp fishing processing facility by numerous companies, including California Dry Dock Company, San Francisco Dry Dock Company, and Union Iron Works (subsequently purchased by Bethlehem Steel).

The Formerly Used Defense Site (FUDS) eligible portion of former Hunters Point Shipyard Annex, hereinafter referred to as "Site," was used by the U.S. Navy and Naval Radiological Defense Laboratory (NRDL) from 1942 to 1984. The mission statement of the NRDL at the time it occupied the Site was "to perform research, development, test and evaluation of the effects of nuclear explosions, natural and controlled nuclear processes, nuclear accidents and incidents, and related fields of science and engineering." A Naval housing area was also present on the Site.

Tetra Tech, Inc. conducted site reconnaissance on 09 November 2006 and 07 February 2007, with accompaniment by landowners/representatives of former Buildings 815, 820, 830, and 831. The objectives of the Site reconnaissance were to verify any evidence of Department of Defense (DoD) activity, document any environmental areas of interest, and document the current status of the Site. During the visit, an effort was made to identify evidence of stressed vegetation, chemical odors, surface stains, underground or aboveground storage tanks and associated appurtenances, drum storage, drainage patterns and drainage sumps, and any signs of adverse environmental conditions.

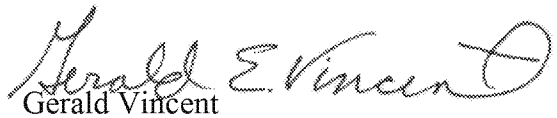
In addition, all available contacts with information pertaining to the Site were interviewed. The Site visit and interviews helped establish the dates of DoD occupancy, the nature of DoD activities, and land improvements. Based on the results of records research, no further DoD action is recommended for this site.

Please see the attached document, "Finding of No Department of Defense Actions Indicated," for specific details. This Site is recommended for No Department of Defense Actions Indicated at this time.

These CON/HTRW, and HTRW project categories are recommended for No Department of Defense Actions Indicated (NDAI) at this time. Please see the enclosed document, "Finding of No Department of Defense Actions Indicated," for specific details.

Please review the attached report and provide comments by 15 February 2014. If you have any questions or comments, please contact me at (916) 557-7452 or email Gerald.E.Vincent@usace.army.mil.

Sincerely,



Gerald Vincent
Chief, BRAC/FUDS Section
U.S. Army Corps of Engineers, Sacramento District
1325 J Street, Sacramento, CA 95814-2922

Enclosures: Finding of No Department of Defense Actions Indicated – Hunters Point Shipyard Annex, Findings and Determination of Eligibility – Hunters Point Shipyard Annex, Hunters Point Shipyard Annex Trip Report

FINDING OF

NO DEPARTMENT OF DEFENSE ACTIONS INDICATED

December 2013

1. SITE NAME: Former Hunters Point Shipyard Annex

FORMERLY USED DEFENSE SITE PROJECT NUMBER: J09CA1033

FUDSMIS DATABASE PROJECT NUMBERS: 00 (PA/INPR) 01(HTRW), 02 (CON/HTRW), 03 (CON/HTRW)

LOCATION:
City: San Francisco
County: San Francisco
State: California

2. POINTS OF CONTACT:

Property owners at the time of the site visit:
Theodore Lowpensky
900 Palou Avenue
San Francisco, California 94124

U.S. Army Corps of Engineers:
Gerald E. Vincent
FUDS Program Manager
U.S. Army Engineer District, Sacramento Corps of Engineers
(916) 557-7452
Gerald.E.Vincent@usace.army.mil

State of California:
Department of Toxic Substances Control
Ms. Carolyn Tatoian-Cain
Sacramento Field Office
8800 Cal Center Drive
Sacramento, CA 95826-3200
(916) 255-3565

3. SITE DESCRIPTION:

The Formerly Used Defense Site (FUDS) eligible portion of former Hunters Point Shipyard Annex, hereinafter referred to as the "Site," comprises approximately 30 acres in the City and County of San Francisco, California, and includes former Buildings 815, 820, 830 and 831. The coordinates for the Site are 37°43'34" North and 122°22'25" West. A recent aerial photograph of the Site region can be viewed using Google Earth (http://earth.google.com/) or a similar mapping program

4. SITE HISTORY:

Mission San Francisco de Asis was founded in 1776 along Point Avisidero (now known as Hunters Point). The inland area, known then as Point Viejo, was used for cattle grazing. By 1849, pioneers Robert, John, and Phillip Hunter established residences and a commercial shipping business along the promontory. The Site later became known as Hunters Point, named after the Hunter family. From 1867 to 1939, Hunters Point was used as a commercial shipping port, dry dock, ship repair facility, and shrimp fishing processing facility by numerous companies, including California Dry Dock Company, San Francisco Dry Dock Company, and Union Iron Works (subsequently purchased by Bethlehem Steel).

The FUDS-eligible portion of the Site was used by the U.S. Navy and Naval Radiological Defense Laboratory (NRDL) from 1942 to 1984. Buildings 815, 820, 830, and 831 were used in association with the NRDL. The NRDL was involved with practical and applied research on the effects of radiation on living organisms and on natural and synthetic materials, in addition to decontamination methods, personnel protection, and the development of radiation detection instrumentation (Naval Sea Systems Command 2004). Their mission statement during tenure at the Site was "to perform research, development, test and evaluation of the effects of nuclear explosions, natural and controlled nuclear processes, nuclear accidents and incidents, and related fields of science and engineering" (Naval Sea Systems Command 2004).

In 1946, the Site was chosen as a logical location for the NRDL headquarters. Construction of Building 815 began in 1952 and, by March 1955, most of the NRDL's 600 staff members occupied and used this building as their main research facility and headquarters (Naval Sea Systems Command 2004).

Building 815 comprised seven floors. The basement was used for various support facilities. The first floor was the lobby and guard office and had a building equipment room, storage rooms, and laboratories. The Health Physics Division, instrument repair, maintenance, and calibration facilities were located on the second floor. Administration operations took place on the third floor. The Nucleonics Division laboratories and offices were located on the fourth floor. Laboratories and animal quarters and offices of the Biological and Medical Sciences Division were located on the fifth floor, and the Chemical Technology Division laboratory facilities were located on the sixth floor. The cafeteria and auditorium occupied the seventh floor (Naval Sea Systems Command 2004).

The NRDL also used Building 820, which housed a cyclotron particle accelerator that was never fully functional. In general, cyclotrons have the capacity to use electrical energy to generate radiation and charged particles. The cyclotron located in Building 820 was built during the last few years (1965–1969) of the NRDL's existence (Naval Sea Systems Command 2004). According to Naval Sea Systems Command (2004), "*it never generated a particle beam external to the machine nor did it ever operate at its full power.*"

Buildings 830 and 831 were the site of the NRDL's animal breeding facility and laboratory. In Building 830, animals were irradiated with laboratory x-ray machines. Building 831 consisted of outdoor animal kennels. No documentation for the use or storage of radiological materials in Building 830 was found during records research, nor does the Building 830 floor plan indicate such activities. At other locations around the site, including Building 815, animals were exposed to high levels of radioactivity and injected with radioactive materials (Naval Sea Systems Command 2004). When tests were concluded, the animals that had been exposed to radioactive material were placed in drums and buried at sea or disposed of off-site at a radioactive waste disposal facility (Naval Sea Systems Command 2004).

On 25 April 1969, the U.S. Navy's Chief of Naval Material issued a letter announcing that the NRDL would be disestablished by December 1969 (Naval Sea Systems Command 2004). At this time, all radiological activities on-Site were suspended. All areas involving radiological materials were required to be surveyed and decontaminated to acceptable levels for future unrestricted use, and radiological materials were disposed of off-site at a licensed disposal facility.

5. SITE INVESTIGATIONS/CURRENT STATUS

Tetra Tech found the following previous environmental documents done on the Site.

- *Inventory Project Report Hunters Point Annex, Treasure Island San Francisco, California Site No. J09CA1033*, prepared by the United States Army Corps of Engineers (USACE) in April 1991, revised in June 1994, and December 2011, provides a brief history of all of former Hunters Point Shipyard Annex (including the BRAC portion). This report details Buildings 815, 820, 830, and 831 and states that an Atomic Energy Commission (AEC) health physicist surveyed all radiological areas, including buildings, in 1979 and 1980 and deemed them decontaminated and suitable for public or private operations without restrictions. A portion of former Hunters Point was determined to be formerly used by the DoD and eligible for the DERP for FUDS.

- *Parcel E, Remedial Investigation, Draft Final Report, Hunters Point Shipyard, San Francisco, California*, prepared by Tetra Tech EMI in October 1997, presents the findings

from the remedial investigation at Parcel E of former Hunters Point. The report was prepared for the Department of the Navy and investigates 26 areas of concern identified through previous research. Three of the areas of concern were the FUDS-eligible Buildings 815, 820, and 830 and 831. Tetra Tech EMI recommended 19 sites for evaluation in a feasibility study for risk management and possible remediation, including Buildings 820, 830, and 831.

- *Final Basewide Environmental Baseline Survey, Revision 01, Hunters Point Shipyard, San Francisco, California, Volume 1 of 2*, prepared by Tetra Tech EMI in September 1998, presents the findings for the basewide environmental baseline survey. The report was prepared for the Department of the Navy and provides a summary of all of the facilities on the whole base that are potential areas of concern. No recommendations were provided for the FUDS-eligible portions of former Hunters Point Shipyard Annex because they were covered under the DERP for FUDS.

- *Hunters Point Shipyard Historical Radiological Assessment History of the Use of General Radioactive Materials*, prepared by the Department of the Navy in February 2004, provides a detailed history of former Hunters Point Shipyard from 1939 to 2003. This report focuses on the use of radiological materials at this former military site. Areas are broken down into parcels and the FUDS eligible portions (Buildings 815, 820, 830, and 831) are addressed separately. The radiological contamination potential for Building 815 is listed as likely, although the building was surveyed and decontaminated in 1969, 1970, 1978, and 1979 and met release criteria for that period. Radiological contamination potential for Buildings 820, 830, and 831 is listed as unlikely. Therefore, no official scoping surveys were conducted for these buildings.

- *Records Research Report, Hunters Point Shipyard Annex, FUDS No. J09CA1033*. Prepared by Tetra Tech, Inc. in 2007. This report determined that the Site is eligible for the FUDS program and included records research and a Site visit to evaluate Areas of Interest (AOIs). Three FUDS-eligible AOIs were identified, associated with gasoline and laboratory waste underground storage tanks (USTs) at Building 815, and radiological concerns at Buildings 820, 830, and 831.

- *Final Status Survey Report, Radiological Investigation of the Building 815 Laboratory Waste Underground Storage Tanks*. Prepared by Tetra Tech, Inc. in 2011. Tetra Tech, Inc. was contracted by the USACE, Sacramento District to conduct radiological surveys of the two laboratory waste USTs at Building 815. The survey found no radiological contamination in excess of the Derived Concentration Guideline Level (DCGL), concluded that any residual radiological contamination was indistinguishable from background levels, and recommended no further investigation.

6. CORRECTIONS TO THE INPR

The INPR reports that Building 820 was used for storage from 1963 to 1981. According to the Historical Radiological Assessment (HRA) prepared by the Department of the Navy in 2004, this building contained a cyclotron associated with NRDL activities; however, it was never fully operational. The current landowner, Mr. Theodore Lowpensky, confirmed that the building contained a cyclotron, but added that it was used as a supply and equipment storage area for a short time after the NRDL activities at the Site ceased in 1969. The INPR also reports the presence of four USTs (two diesel fuel USTs and two laboratory waste USTs). Since the time the INPR was written, Mr. Lowpensky has removed the diesel fuel USTs and obtained site closure from the San Francisco Bay Regional Water Quality Control Board. The two laboratory waste USTs are currently used by Mr. Lowpensky for storm water containment.

7. NDAI RECOMMENDATION:

Three Projects have been identified for the Site: AOI 1—Former Building 815, AOI 2—Former Building 820, and AOI 3—Former Buildings 830 and 831.

HTRW Project Number J09CA103301 (AOIs 2 and 3): Former Building 820 was used by the NRDL to house a cyclotron that was never fully functional. After the disestablishment of the NRDL in 1969, the United States Nuclear Regulatory Commission determined that a radiological scoping survey of this building was not necessary because radioactive material was never used or stored there.

Former Buildings 830 and 831 were used by the NRDL as a place to breed and kennel pathogen-free animals. In addition, Building 830 was used as a laboratory to study the effects of x-rays on animals. As with Building 820, no radiological scoping surveys were required for Buildings 830 or 831 during the 1969 disestablishment of the NRDL because radioactive material was never used or stored in these facilities.

CON/HTRW Project Number J09CA103302 and J09CA103303 (AOI 1)—A gasoline station (Building 802) was constructed at the Site circa 1943. Records research indicates that the gasoline station was used for less than 10 years. The U.S. Navy constructed Building 815, which included a basement, at the former location of Building 802 in 1952. Based on aerial photograph interpretation and the design of Building 815, the gasoline station and any associated underground storage tanks were removed by the U.S. Navy for the construction of the basement of Building 815. Radioactive material was stored and used in Building 815 during Department of Defense (DoD) operations at the Site. After the NRDL was disestablished in 1969, a series of radiological scoping surveys and decontamination procedures were carried out inside the building and in two former underground laboratory waste storage vaults located along the western side of the building. In 1979, the Nuclear Regulatory Commission declared this building clear for unrestricted use using the 1974 Atomic Energy Commission regulations for radioactive material, which have not changed since 1974 (Department of the Navy 1997).

In February 2011, a Final Status Survey Report radiological investigation was completed for the laboratory waste underground storage vaults at Building 815 (Tetra Tech 2011). The survey data indicated no radiological contamination in excess of the DCGL and that the levels of residual radiological contamination are not distinguishable from background. Therefore, Building 815 was recommended for no further response action.

The Former Hunters Point Shipyard Annex property is recommended for No Department of Defense Action Indicated (NDAI). No hazards or potential environmental liabilities from past use by the Department of Defense remain based upon records research, Site inspections, and removal actions.

8. NDAI CONCURRENCE:

Harold E. Vincent	
U.S. Army Corps of Engineers Sacramento District	Department of Toxic Substances Control
8 December 2013	
Date	Date

Form B-3. Inventory Project Report (INPR) Checklist

Checklist Preparer: Tetra Tech, Inc.	Date: 02 February 2012	
Name: Debra Soper	Title: Program Manager	
District: 8th U.S. Congressional District	Phone Number: (916) 643-4826 ext 104	
Email address: debra.soper@tetratech.com		
Property information:		
Property Name: **Former Hunters Point Shipyard Annex (J09CA1033)**		
Previous Names, if any: None		
Former Service: US Navy		
Property Location: Section 26, Township 2 South, and Range 5 West, Mt. Diablo Meridian		
Street: 900 Palou Avenue		
City: San Francisco	County: San Francisco	State: California
Latitude: 37°43'34" North	Longitude: 122°22' 25" West	
Current Use: Industrial and Residential		
Primary Property Owner Information:		
Name: UC San Francisco Hunters Point Animal Care Facility		
Address (if other than above):		
Street:		
City:	County:	State: California
Phone Number: (415) 822-7422		

Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

		YES	NO	NA
Property Document Search:				
✕	Were the following records available and used in the preparation of the INPR?			
1	Archives records	✓		
2	Site maps, including facility as-built drawings	✓		
3	Aerial or ground photographs	✓		
4	Prior studies, documents, reports, property contamination records, or private/public sampling data	✓		
5	Compliance orders issued to current or past owners/operators		✓	
6	Real estate records, deeds, or property transfer records	✓		
7	Local historical societies and public libraries	✓		
8	EPA/State environmental records or reports	✓		
9	EOD incident reports		✓	
10	Other documentation	✓		
Property Visit:				
✕	Indicate whether the following have been contacted and interviewed to obtain information.			
11	Current landowner(s)	✓		
12	Neighbors	✓		
13	Previous landowner(s)	✓		
14	Prior employee(s)		✓	
15	Federal agencies, including regulatory agencies	✓		
16	State agencies, including regulatory	✓		
17	Local agencies, including regulatory and law enforcement agencies	✓		
18	Other available sources	✓		
19	Was access to the property possible (right of entry provided by landowner)?	✓		
20	Was the property physically visited?	✓		
21	Was access sufficient to allow for a thorough property inspection?	✓		
22	Was access sufficient to identify potential hazards?	✓		
23	Did regulatory agencies accompany USACE on the property visit?		✓	
24	Did the landowner accompany USACE on the property visit?	✓		
25	Was there evidence of a release of hazardous material or use/disposal of military munitions during DoD control?		✓	
26	Was there evidence of a release of potential DoD hazardous material into a public or private drinking water supply?		✓	
27	Is there evidence of a release into a public or private drinking water supply due to deterioration of the system through ordinary use?		✓	
28	Is there evidence of a release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?		✓	

		YES	NO	NA
29	Is some other program actively involved with the property (i.e., another Federal, state, or tribal program)?		✓	
30	Is there evidence that activities by non-DoD parties at the property may be the source of potential contamination?		✓	
31	Was information on hazards found at similar types of FUDS properties considered in identifying potential hazards at this property?	✓		
32	Were site maps compared to actual conditions during the site visit?	✓		
33	Were photos taken?	✓		
34	Were property owners advised to contact the USACE if evidence of potential hazards is found later?	✓		
35	Was a trip report of the property visit prepared?	✓		
Property Eligibility Determination: (refer to Chapter 3)				
36	Is the property Categorically Excluded?		✓	
37	Are there release, hold harmless, "as- is", or indemnification clauses in deeds or property transfer documents that limit DoD liability?		✓	
38	Is there evidence of the property this being a Third Party Site?		✓	
39	Is the property eligible under FUDS?	✓		
40	If necessary, has a ***"Categorical Exclusion or Ineligible Property"*** form been prepared (Worksheet B-1)			✓
FUDS Property Screening:				
41	Was a CERCLA Preliminary Assessment completed?	✓		
42	Was a RAC Worksheet prepared for the property?		✓	
Project Eligibility Determination (refer to Chapter 3)				
43	Have all typical hazards been investigated for possible occurrence at this type of property?	✓		
44	Were hazards identified?		✓	
45	Are identified hazards of DoD origin?		✓	
46	If identified hazards were of non-DoD origin, has the lead regulatory agency been informed? (Provide name, phone number, date)			✓
47	Is the current landowner under a RCRA or CERCLA clean-up order?		✓	
48	Has the "right of first refusal" been exercised by an adjacent DoD installation?		✓	
49	Is there evidence of beneficial use?		✓	
50	Are there other policy considerations against recommending a project?		✓	
51	Are eligible FUDS projects recommended? (If yes, identify projects below)		✓	
INPR Preparation and Review:				
52	Is the INPR prepared consistent with INPR Content Matrix (Table B-2)?	✓		
53	Is the INPR Property Survey Summary Sheet consistent with Table B-3?	✓		
54	Is the Project Summary Sheet consistent with Table B-4?	✓		
55	If appropriate, has a "***BD/DR Project Summary Sheet Checklist***" been prepared? (See Worksheet B-2)			✓
56	If the INPR recommends a PRP/HTRW project, has the PRP District reviewed the INPR? (See Figure B-1)			✓

		YES	NO	NA
57	If the INPR recommends a PRP/HTRW project has the HRTW Center of Expertise reviewed the INPR?			✓
58	If the INPR recommends a MMRP or PRP/MMRP project, has the MM Center of Expertise reviewed the INPR? (See Figure B-1)			✓
59	Was the draft INPR coordinated with Office of Counsel and Real Estate?	✓		
60	Was the draft INPR shared with the Lead Regulatory Agency after internal USACE review?	✓		

Narrative comments to explain above notations:

9. No EOD incident reports were found during records research.

14. Tetra Tech was unable to locate anyone who worked on the Site during DoD use.

23. The site visits were performed by Tetra Tech, Inc.

42. No RAC worksheet was necessary for the Site because it did not include MMRP areas of interest.

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES

REVISED FINDINGS AND DETERMINATION OF ELIGIBILITY

HUNTERS POINT ANNEX, TREASURE ISLAND
SAN FRANCISCO COUNTY, CALIFORNIA
SITE NO. J09CA103300

REVISION DECEMBER 2011

FINDINGS OF FACT

1. The United States of America (USA) acquired fee title to 964.91 acres by Declaration of Taking (D/T), transfer, and purchase, between 1940 and 1966. The USA also acquired approximately 1.84 easement acres between 1959 and 1988. The site totaled 966.75 acres. ~~An additional 17.07 acres were acquired and disposed of for an off-base site known as Islais Creek.~~

2 The site was also known as Hunters Point Division, San Francisco Bay Naval Shipyard, CA. The site was acquired by the Navy and operated as a shipyard or ship repair facility beginning in 1940. The Navy operated the shipyard until 1975, and in May 1976, leased it to Triple A Machine Shop. Triple A operated the ship repair facility and subleased numerous buildings to other private commercial and light industrial firms. Triple A vacated the facility on 15 June 1987 and the Navy retained possession of the property. The retained acreage is currently an inactive naval shipyard.

3 The Department of the Navy issued a notice of surplus on 03 September 1976 for 49.00 acres located on the western portion of Hunters Point. In 1976, the General Services Administration (GSA) reported 49.00 acres excess. Of the 49.00 acres excessed, the GSA quitclaimed, on 14 October 1977, 2.89 acres to the San Francisco Housing Authority for park and recreational use, and the Hunters Point Boys Club facility. On 09 October 1980, the GSA quitclaimed 17.10 acres to the Redevelopment Agency of San Francisco for the development of a family housing project predominantly owner occupied by individuals or families of low to moderate income. On 07 April 1978, the GSA assigned by deed 3.83 acres to the Regents of the University of California for educational purposes. On 14 July 1981, the GSA quitclaimed 2.33 acres to Theodore and Bernice Lowpensky for private use. On 12 December 1984, the GSA quitclaimed 4.23 acres to Crisp Building, Inc. The disposed acreage totalled 30.38 acres. The remaining acreage at Hunters Point (936.37) is in active use. According to the Hunters Point Real Estate Summary Map, updated 04 October 1990, the remaining 18.62 acres (of the 49.00 total areas) were withdrawn from excess from the GSA by the Navy (date unknown) for future military housing construction.

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES

REVISED FINDINGS AND DETERMINATION OF ELIGIBILITY

HUNTERS POINT ANNEX, TREASURE ISLAND
SAN FRANCISCO COUNTY, CALIFORNIA
SITE NO. J09CA103300

REVISION DECEMBER 2011

DETERMINATION

Based on the foregoing findings of fact, the site has been determined to be formerly used by the DOD. Therefore, it is eligible for the Defense Environmental Restoration Program for Formerly Used Defense Sites, established under 10 U.S.C. 2710 et seq.

14 July 1994
Date

Milton Hunter
Brigadier General, U.S. Army
Commanding

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES

INVENTORY PROJECT REPORT

HUNTERS POINT ANNEX, TREASURE ISLAND
SAN FRANCISCO COUNTY, CALIFORNIA

SITE NO. J09CA103300

Prepared for:

SACRAMENTO DISTRICT, CORPS OF ENGINEERS
1325 J Street
Sacramento, CA 95814-4794

April, 1991
REVISED June, 1994
REVISION 2 DECEMBER 2011

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO J09CA103300
HUNTERS POINT ANNEX, TREASURE ISLAND

SITE NAME: Hunters Point Annex, Treasure Island. The site was also known as Hunters Point Division, San Francisco Bay Naval Shipyard, CA.

LOCATION: The site is located in the San Francisco Bay area (San Francisco County), approximately five miles south-southeast of the city of San Francisco, California (Figure 1).

SITE HISTORY: The United States of America (USA) acquired fee title to 964.91 acres by Declaration of Taking (D/T), transfer, and purchase, between 1940 and 1966. The USA also acquired approximately 1.84 easement acres between 1959 and 1988. The site totaled 966.75 acres. ~~An additional 17.07 acres were acquired and disposed of for .an off-base site known as Islais Creek. This report does not contain any information on the off-base site. Islais Creek is addressed under FUDS No. J09CA1099.~~

The Navy operated Hunters Point as a shipyard or ship repair facility from 1940 until 1975 and in May 1976, leased approximately 773 acres to Triple A Machine Shop for eleven years. Triple A operated the ship repair facility and subleased numerous buildings to other private commercial and light industrial firms. Operation of the facility by the Navy and Triple A generated a wide variety of solid and liquid wastes over many decades. These wastes were disposed of in an on-base industrial landfill. Triple A vacated the facility on 15 June 1987 and the Navy began proceedings to retake possession of the 966.75 acre site. The site is currently an inactive facility.

The Department of the Navy issued a notice of surplus on 03 September 1976 for 49.00 acres located on the western portion of Hunters Point. In 1976, the General Services Administration (GSA) reported 49.00 acres excess. The excess property was improved with 27 buildings, 13 of which comprise the area known as Inchon Village, a public housing area. The remaining buildings were used for storage, animal research and transient housing. The excess area also contained sidewalks, electrical, gas, and potable water distribution systems, a street lighting system, and a storm and sanitary sewer. A Southern Pacific railroad right-of-way runs through the excess area. Any transfer of property was subject to certain easement reservations for continued operation of the basic shipyard. Of the 49.00 acres excessed, the GSA quitclaimed, on 14 October 1977, 2.89 acres, improved with Building No. 54, to the San Francisco Housing Authority (SFHA) for park and recreational use and the Hunters Point Boys Club facility. On 09 October 1980, the GSA quitclaimed 17.10 acres to the Redevelopment Agency of the

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO J09CA103300
HUNTERS POINT ANNEX, TREASURE ISLAND

City and County of San Francisco for development of a family housing project predominately owner occupied by individuals or families of low to moderate income (Figure 2). By letter dated 23 January 1980, the United States Nuclear Regulatory Commission (NRC) responded to the Department of the Navy, Naval Sea System Command in Washington D.C. concerning surveys and decontamination of the facility formerly known as the Naval Radiological Defense Laboratory in Buildings 364 (outside of the inventory property), 815 and 816. According to the General Development Map of Hunters Point Naval Shipyard, dated 05 February 1970, Building 815 was located on the 17.10 acres deeded to the Redevelopment Agency of the City and County of San Francisco. The NRC files were reviewed. Surveys and decontamination of those facilities were found to have met NRC guidelines for release to unrestricted use with no plans for additional on-site inspections or other actions regarding the matter. This letter was signed by Fuel Facility and Materials Safety Branch. On 07 April 1978, the GSA assigned by deed 3.83 acres of land improved with two building (Nos. 830 and 831) to UC for educational purposes.

On 14 July 1981, the GSA quitclaimed 2.33 acres of land improved with one building (no. 820) to Theodore and Bernice Lowpensky. On 12 December 1984, the GSA quitclaimed 4.23 acres to Crisp Building, Inc. According to the Hunters Point Real Estate Summary Map, updated 04 October 1990, the remaining 18.62 acres (of the 49.00 total acres) were withdrawn from excess from the GSA by the Navy (date unknown) for future military housing construction. The disposal acreage totaled 30.38 acres, currently leaving Hunters Point 936.37 acres.

MOST RECENT SITE HISTORY: The 30.38 acre site is currently comprised of public housing projects, small scale private industry, vacant land, and an animal research laboratory. There are four existing DOD-built structures in the southern portion of the site, all are currently occupied. The structures include building numbers 815, 820, 830, and 831 (Figure 2). Building number 815 is a seven-story concrete structure built in 1955 and located in the southeastern portion of the site. The DOD used the structure for a radiological defense laboratory from 1955 to 1979 the structure is currently occupied by File Safe (leased from Mr. Theodore Lowpenski since 1984) a microfiche document storage company. Building number 820 is a two-story concrete structure built in 1963 and located in the southwestern portion of the site. The DOD used the structure for equipment storage from 1963 to 1981.

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO J09CA103300
HUNTERS POINT ANNEX, TREASURE ISLAND

The structures are currently occupied by the University of California San Francisco (UCSF) and are used for animal research and kennels. The remainder of the site is under the jurisdiction of the San Francisco Housing Authority and consists of vacant land, public housing projects, and the Hunters Point Boys Club.

A portion of an inactive 20-acre landfill identified as Industrial Landfill IR-01 is located on the site (Figure 3) and to the south of the site. The majority of the landfill (19.30 acres) is located on Hunters Point Naval Shipyard property. A small portion of the landfill (0.70 acres) is located on the University of California San Francisco (UCSF) property. The landfill was developed on fill material adjacent to the San Francisco Bay for the disposal of domestic, industrial, construction, and other solid and liquid wastes which were generated by shipyard and shop operations. The landfill was used between 1958 and 1974 by the Navy and between 1976 and 1987 by Triple A. Reportedly, little control was placed on the disposal of solid and liquid wastes at this site (Harding Lawson Associates, 1988). Solid wastes disposed of at the landfill included an estimated 235,000 tons of sandblast material, 26,000 tons of paint scrapings, 500 cubic yards of asbestos, 6,000 pounds of dials and knobs containing fluorescent radium, heavy metals, plastics, wood, and rags. Although most of the radioactive sandblast waste from ships decontaminated after nuclear testing at Bikini Atoll was disposed off site, it is possible that radioactive sandblast waste may be present at the landfill (U.S. Department of the Navy, 1982). Liquid wastes disposed of at the landfill (an estimated 21,000 gallons of liquid chemical wastes) included solvents, (e.g. Penesolve 84, Penestrip CR, Stoddard Solvent and Stan Kleen), paints, and paint sludges, gasoline and diesel fuels, grease, phenolic compounds associated with wood treatment chemicals, and cyanide wastes. In 1974, the landfill area was covered with clean fill material and landscaped with natural grasses. A storm-water interceptor line was constructed to prevent surface runoff from inundating the landfill. The site visit team observed two scrap metal and wood debris piles to the south of building 830 and outside of the UCSF property boundary.

Soil and groundwater sampling (boring 01UC01) was performed at the landfill on UCSF property (Figure 3) by Harding Lawson Associates in 1989. The sampling consisted of collecting soil samples for lithologic logging and chemical analyses, and

collecting two water samples - one groundwater sample and one surface water sample (UCSW) from an area on the southeast end of the property. Results of the chemical analyses of the four soil samples indicate the presence of a number of inorganic and organic chemicals. All soil samples contained oil and grease at concentrations ranging from 1400 to 3500 parts per million (ppm). All soil samples contained low concentrations of toluene and various concentrations of 15 semi-volatile organic compounds. Two soil samples collected below the water table contained 78 parts per billion (ppb) and 100 ppb of the pesticides 4,4-DDD and 4,4-DDT. Several phenolic compounds, including pentachlorophenol, were also detected; these phenolic compounds are generally associated with wood treatment chemicals or fungicides. Soil samples contained copper at a concentration of 3,210 ppm, which is in excess of the total threshold limit concentration (TLC) of 2,500 ppm, and mercury at a concentration of 24 ppm, which is in excess of the TTLC of 20 ppm. The total concentrations of copper, lead, mercury, and nickel exceeded ten times the soluble threshold limit concentration (STLC) in one soil sample.

The groundwater sample contained low concentrations of 20 semi-volatile compounds, 2 pesticides (4,4-DDD and endosulfan sulfate at 0.13 and 0.10 ppb), and TPH (both gasoline and diesel). The concentration of TPH as gasoline and diesel were 160 ppb and 12,200 ppb. Several phenolic compounds were detected, including phenol at a concentration of 58 ppb.

The surface water sample contained 3 ppb of pentachlorophenol and 2 ppb bis-(2-ethylhexyl)-phthalate.

According to Harding Lawson Associates, 1989, radioactive waste materials were received at Hunters Point from the University of California at Berkeley and from the Lawrence Livermore Laboratories. These wastes were stored in 55-gallon concrete-encased drums and transported to the Farallon Islands by barge, and disposed of in the Pacific Ocean. An estimated 150 drums of radioactive wastes were handled, transported, and disposed each year between 1950 and 1959. In 1955, the Radiological Defense Laboratory in buildings 815 and 816 was completed. Radioactive wastes (solid and liquid) generated in these buildings were transported off the shipyard property by a licensed contractor to an approved Atomic Energy Commission (AEC) landfill. From 1960

to 1969, all solid and liquid radioactive wastes were transported off the Hunters Point Shipyard property. In 1969, 1979, and 1980, buildings 364, 815, and 816 were thoroughly decontaminated by the AEC. The decontamination procedures involved were not described in detail in the Harding Lawson Associates report. All waste material generated during the decontamination process was transported off the shipyard property. In 1975 and 1980, an AEC health physicist monitored all radiological areas (including buildings) of Hunters Point. No radiological contamination was found and the AEC concluded that all former radiological areas could be reused for any public or private operations without restriction.

According to Messrs. Ray Chiang and Richard Powell, former Hunters Point Remediation Project Managers, U.S. Department of the Navy, there is no documented information regarding the disposal of radioactive wastes at the Industrial Landfill. They are not, however, totally dismissing the possibility of the potential for illegal disposal of radioactive wastes at the landfill prior to 1969. Mr. Chiang stated that the Industrial Landfill is currently in remediation (by the Navy) with approximately fifty-percent of the remediation completed to date.

ADDENDUM, JULY 1991:

Evidence surfaced in June, 1991 of four, underground fuel and laboratory waste storage tanks and associated piping on formerly used property (locations depicted at Figures 4 and 5). The underground storage tanks were employed and used by the DOD and were used to store fuel oil and laboratory waste. They are potential sources of environmental contamination.

There is no evidence of hazardous/toxic wastes, explosive ordnance, or building debris resulting from DOD use for the remaining 29.68 acres of the site.

ADDENDUM, DECEMBER 2011:

The off-base site, Islais Creek is addressed under FUDS No. J09CA1099. References to the 17.07 acres acquired and disposed of for the off-base site known as Islais Creek, have been removed from this report by stike through on all text which refers to the separate FUDS site, Islais creek.

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO J09CA103300
HUNTERS POINT ANNEX, TREASURE ISLAND

SITE VISIT: A site visit to Hunters Point Annex was conducted on 26 July 1990. Those present were:

Ms. Sharon Bruno, Sacramento District, Corps of Engineers
Mr. Randy Friedman, Community Relations, Treasure Island
Mr. Paul Robinson and Mr. Doug Perreira, The Earth Technology Corporation

Ms. Bruno provided a brief discussion of the DERP program and the purpose of the site visit. Mr. Friedman then led the group on a tour of the formerly used defense site.

A site visit to Hunters Point Annex was conducted on 17 December 1993. Those present were:

Ms. Natalie Sterling, Mr. Roger Henderson, and Mr. William Mullery Corps of Engineers

Mr. John Cummins and Michael E. McClelland Western Division Naval Facilities Engineering Command.

CATEGORY OF HAZARD: CON/HTRW

CON/HTRW. The site contains four underground fuel and laboratory waste storage tanks and associated piping which are potential sources of environmental contaminants. Residential communities border the site to the north. The site is on private property.

There is an inactive Industrial Landfill (IR-01) located partially on the FUDS site that contains hazardous and toxic materials. The Navy is currently conducting a remedial investigation of the landfill for the portion of the landfill which resides on Navy property. The Navy investigation is being executed under the Base Closure Program. The FUDS site also contains four underground fuel and laboratory waste storage tanks and associated piping which are potential sources of environmental contaminants. Residential communities border the site to the north. The FUDS landfill and fuel storage tank site is on private property.

In discussions between the Corps of Engineers, South Pacific Division and the Department of the Navy, Western Division, it was

agreed that the Navy, as the lead Department of Defense agency at Hunters Point, would request authorization and funding to add the FUDS site (landfill only) to their Base Closure remediation. Execution of the remedial investigation and subsequent remediation under the Navy Base Closure Program is the most expedient way for the Department of Defense to meet the Federal Facility Agreements specified for the Hunters Point site (FFA requirements also address the FUDS site). Since the Navy will seek authorization and funding to remediate the FUDS landfill, only the fuel storage tank site is proposed as a CON/HTRW project at this site under the FUDS program. However, if additional FUDS parcels are found to have been excessed from the Hunters Point Naval Facility, and such parcels are not addressed in the FFA, such contaminated parcels will be proposed for remediation under the FUDS program. ~~At this time only the additional 17.07 acres acquired and disposed of for an off-base site (known as Islais Creek) is being addressed under a separate Inventory Project Report as Site No. J09CA1099.~~

AVAILABLE STUDIES AND REPORTS: EMCON Associates, Area Study for asbestos-containing material and organic and inorganic soil contamination, Hunters Point Naval Shipyard, San Francisco, California, 2 July 1987, Project 365-02.03, 2 volumes.

Department of the Navy, Western Division, Scoping Document Remedial Investigation/Feasibility Studies Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California, 3 March 1988.

Harding Lawson Associates, Results of Soil and Liquid Sampling University of California San Francisco Property Hunters Point Annex, San Francisco. California, 21 December 1989.

U.S. Department of the Navy, Letter to Mayor Diane Feinstein dated 11 February 1982, from A.M. Sinclair, Rear Admiral, U.S. Navy, Deputy Chief Naval Operations, 1982.

Westec Services, Inc., Initial Assessment Study, Hunters Point Naval Shipyard. San Francisco. California, October 1984, Contract No. N62474-83-C-6972.

PA POC: Mr. William Mullery, CESPK-ED-EB, (916) 557-6944.

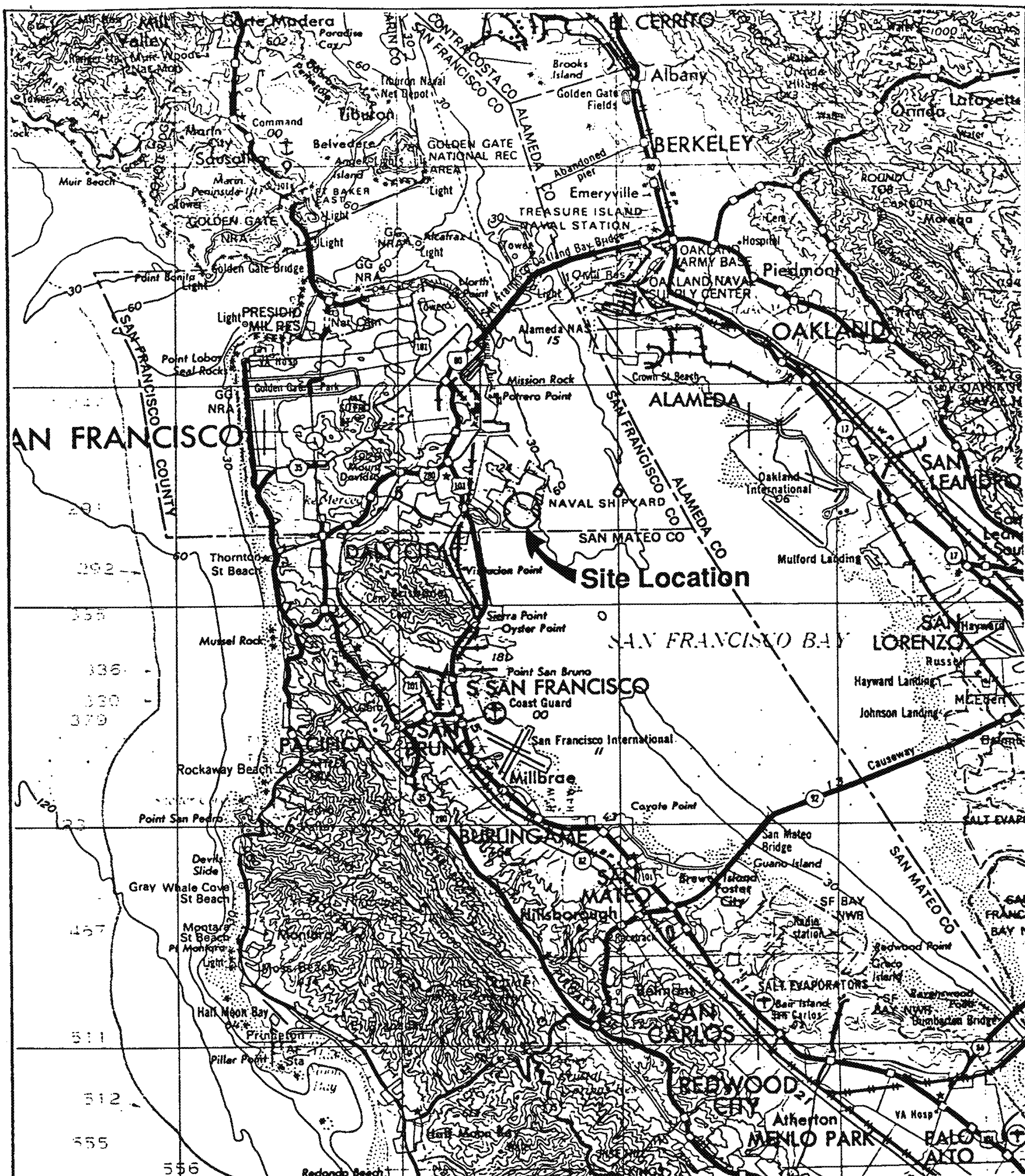


Figure 1

Location Map
Hunter's Point Annex,
Treasure Island

Site No. J09CA103300

Source: Base map from U.S.G.S.
San Francisco Quad

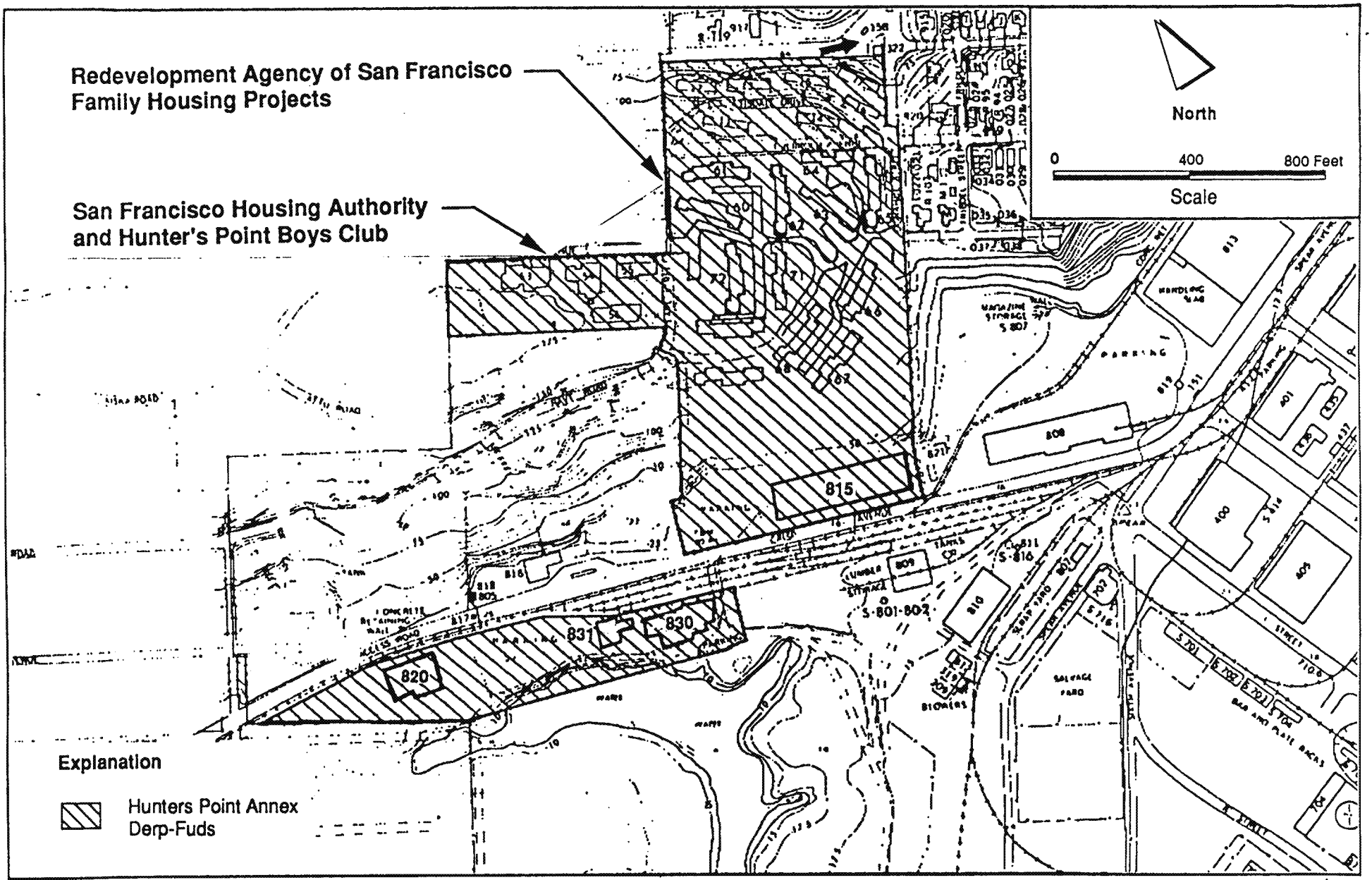


Figure 2

Site No. J09CA103300

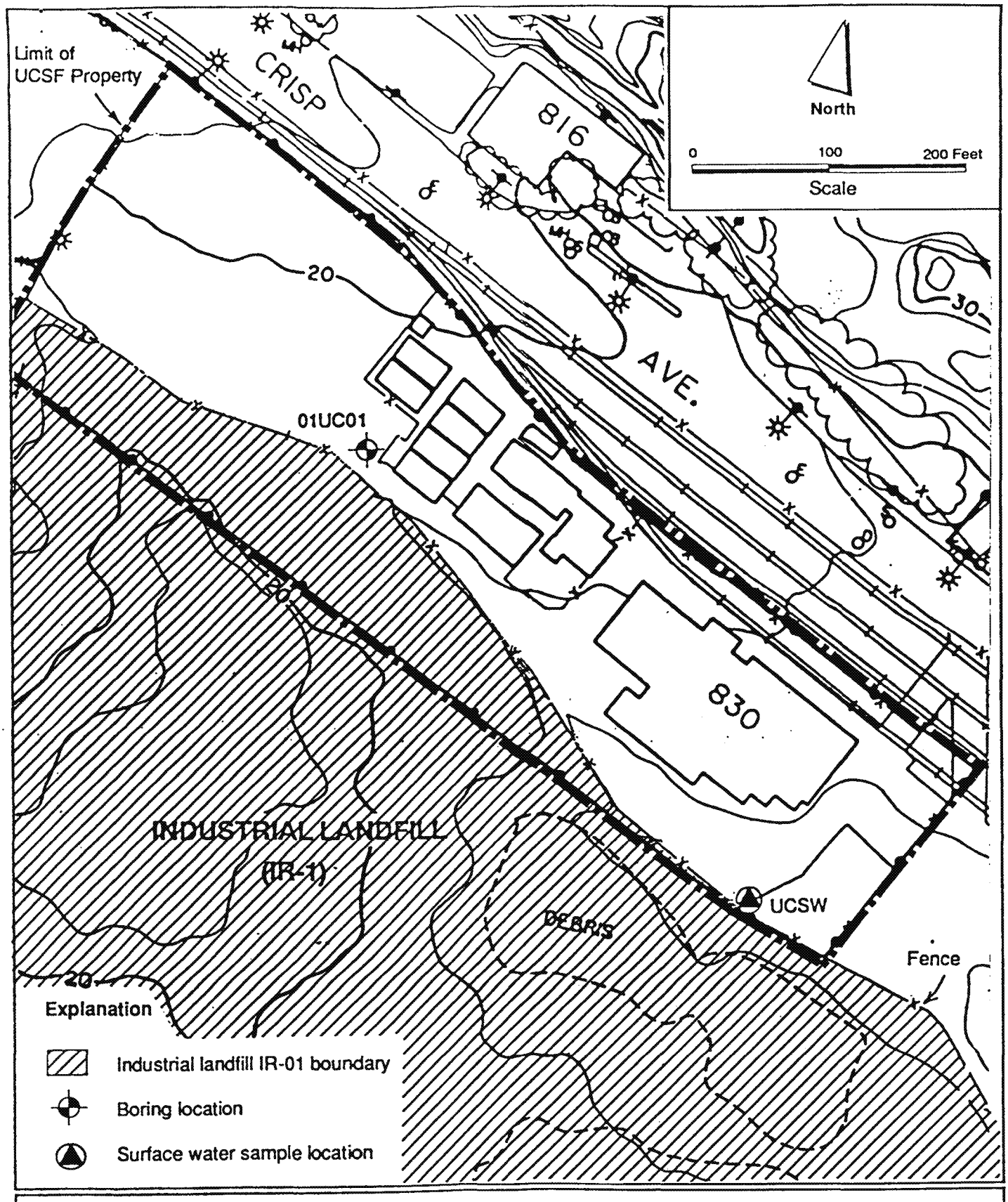


Figure 3

Site No. J09CA103300

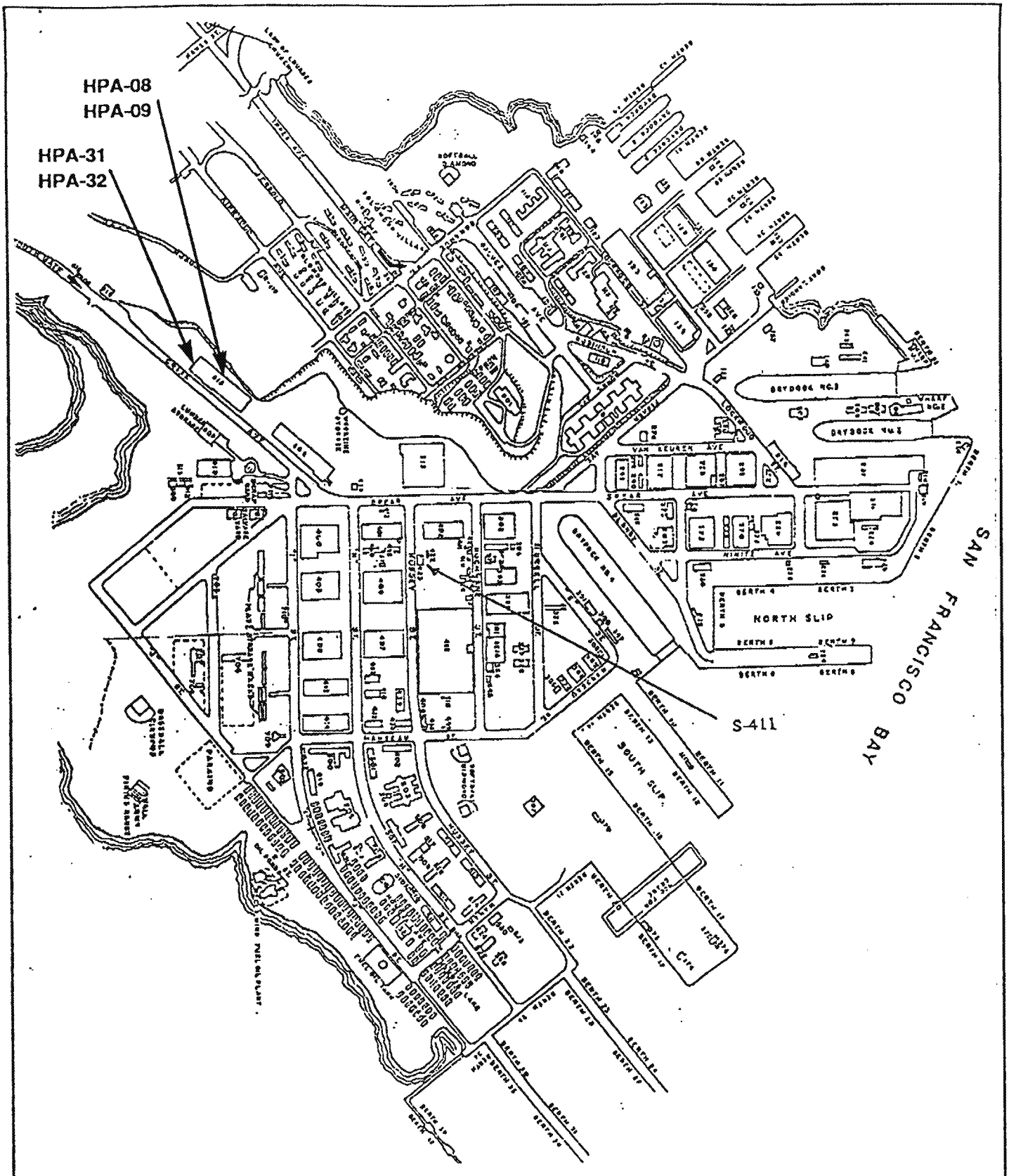


Figure 4

Underground Storage Tank Locations
Hunters Point Annex, Treasure Island

Site No. J09CA103300

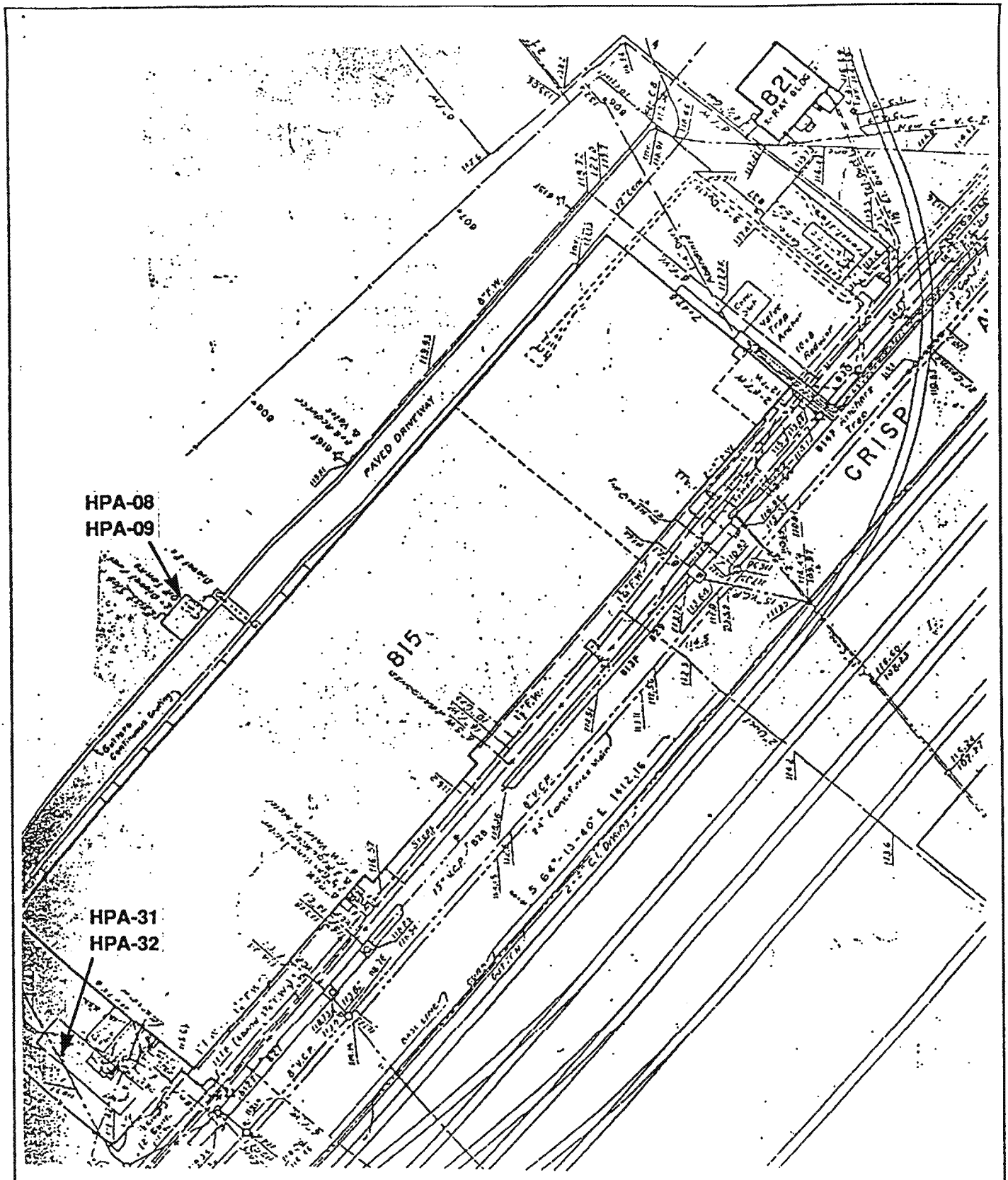


Figure 5

Underground Storage Tank Locations
Hunters Point Annex, Treasure Island

Site No. J09CA103300

PROJECT SUMMARY SHEET
FOR
DERP-FUDS CON/HTRW, PROJECT NO. J09CA103302
HUNTERS POINT ANNEX, TREASURE ISLAND
SITE NO. J09CA103300

PROJECT DESCRIPTION: The site contains four underground fuel and laboratory waste storage tanks and associated piping as located on figure 4 of the site summary sheet.

PROJECT ELIGIBILITY: Records indicate that the UST's were built and used solely by the Navy between 1958 and 1974.

POLICY CONSIDERATIONS: None.

PROPOSED ACTIVITIES: The project consists of the removal of two 1,000 gallon underground fuel oil storage tanks and two 15,000 gallon laboratory waste storage tanks, and removal of approximately 200 feet of piping.

DD FORM 1391: Attached.

PA POC: Mr. William Mullery, CESPK-ED-EB, (916) 557-6944.

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

27 NOV 1995

CEMP-RF (200-1a)

MEMORANDUM FOR: COMMANDER, SOUTH PACIFIC DIVISION, ATTN: CESPD-PM

SUBJECT: Defense Environmental Restoration Program - Formerly Used Defense Site (DERP-FUDS), Inventory Project Report (INPR) for Hunters Point Annex, Treasure Island, San Francisco County, California, Site No. J09CA103300

1. References:
   a. Memorandum, CESPD-ED-G, 15 July 1994, subject as above (Encl).
   b. DERP-FUDS Program Manual, CEMP-R, 8 December 1993.

2. This memorandum authorizes a Containerized Hazardous, Toxic and Radioactive Waste (CON/HTRW) Project No. J09CA103301 at the subject site. Request you execute the project in accordance with ref. 1b.

3. Sacramento District is assigned overall Project Management (PM) responsibility for this site and execution of the CON/HTRW project.

4. POC is James Huang at (202) 761-8883.

FOR THE DIRECTOR OF MILITARY PROGRAMS:

FOR CARY JONES CRAIG COFFMAN, LTC
Chief, Environmental Restoration Division
Directorate of Military Programs

Encl
wd encl

CF:
CEHND-PM-EP
CESPK-PM

DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
630 Sansome Street, Room 720
San Francisco, California 94111-2206

REPLY TO
ATTENTION OF:

CESPD-ED-G (200-1c)

15 JUL 1994

MEMORANDUM FOR

Commander, U.S. Army Corps of Engineers, 20 Massachusetts Avenue, N.W., Washington, DC 20314-1000

Commander, U.S. Army Engineer Division, Huntsville, P.O. Box 1600, Huntsville, Alabama 35807-4301

SUBJECT: Defense Environmental Restoration Program For Formerly Used Defense Sites (DERP-FUDS), Inventory Project Report (INPR) for Hunters Point Annex, Treasure Island, San Francisco County, California, Site No JO9CA103300

1. I am forwarding the INPR for Hunters Point Annex, Treasure Island for appropriate action. The site is eligible for DERP-FUDS.

2. I recommend that CEMP-R approve the proposed CON/HTRW project and assign it through this headquarters to CESPK.

3. No other projects are proposed under our program at this time for this site. Execution of the remedial investigation and subsequent remediation of the landfill area under the Navy Base Closure Program is the most expedient way for the Department of Defense to meet the Federal Facility Agreements specified for the Hunters Point site. This is being coordinated with the Department of the Navy and appropriate regulatory agencies.

Milton Hunter

MILTON HUNTER
Brigadier General, U.S. Army
Commanding

CESPK-ED-E (200-1a) 28 June 1994

MEMORANDUM FOR Commander, South Pacific Division

SUBJECT: DERP-FUDS Inventory Project Review for Hunters Point Division (San Francisco Bay Naval Shipyard), California, Site No. J09CA103300

1. This Inventory Project Report (INPR) addresses the DERP-FUDS preliminary assessment of the Hunters Point Division Site (San Francisco Naval Shipyard). Several site visits were conducted between 1990 and December 1993. Three copies of the INPR are enclosed.

2. We have determined that the site was formerly used by the Navy and meets the eligibility requirements under the DERP-FUDS. A recommended Findings and Determination of Eligibility is included.

3. The Department of the Navy has proposed to investigate and remediate the landfill area under the Base Closure Program. The majority of the landfill is on Navy property, while a small portion extends into the FUDS. Therefore, we only recommend a CON/HTRW project at this site under the FUDS program.

4. I recommend that you:

a. Approve and sign the Findings and Determination of Eligibility.

b. Forward a copy of this INPR to CEMP, CEMRD and CEHND with the recommendation that the Sacramento District execute the CON/HTRW project.

Encl

JOHN N. REESE
COL, EN
Commanding

MULLERY/clb
DOYLE
WHITNEY
KORMAN
STUHR
FOR REESE

cc (w/o encl):
Rdg File
OC
RE Div
PPMD, Mil/HTRW Br (D. Jones)
Engr Div
✓Env Engr Br, DERP Sec (Mullery)(Pedersen)

Former Hunters Point Shipyard Annex

Trip Report

17 November 2006
0800-1400

Stan Golaski, PG and Craig Marchione

7 February 2007
0630-1630

Molly Henderson and Bill Hamilton

Facility Current Name:	UCSF Animal Care Facility (former Buildings 830 and 831), Lowpensky Moulding (former Building 820), Iron Mountain File Storage Facility (former Building 815), San Francisco Housing Authority Housing Projects and Hunters Point Boys and Girls Club (former civilian housing)
Points of Contact:	Dr. Pierre Lassard, Ted Lowpensky, Bob Legallet, Tim Larsen

General Notes & Information

17 November 2006

0800-1000 Tetra Tech employees Stan Golaksi, PG and Craig Marchione traveled to former Hunters Point Shipyard Annex to meet with Dr. Pierre Lassard of the UC San Francisco Hunters Point Animal Care Facility.

1000-1200 Dr. Lassard led Tetra Tech employees on a Site visit of the outside of former Buildings 830 and 831. In addition, former Buildings 815, 820, and W-418 were visited from public access roads and photographs were taken.

1200-1400 Tetra Tech employees traveled back to the McClellan Park office.

7 February 2007

0630-1000 Tetra Tech employees Molly Henderson and Bill Hamilton traveled to former Building 820 located at 900 Palou Avenue at former Hunters Point Shipyard Annex to meet with Ted Lowpensky.

1000-1030 Ted Lowpensky accompanied Ms. Henderson and Mr. Hamilton around the perimeter of former Building 820, which is currently in use a wood moulding mill. Mr. Lowpensky provided a brief background of the building. He said it was used by the DoD/National Radiological Defense Laboratory as a cyclotron. The interior walls were nine feet thick when he first acquired the building. He used a large piece of machinery with a drill bit to break most of the interior walls down to increase the usable space inside of the building. Mr. Lowpensky informed Tetra Tech employees that a radiological assessment of the building was

conducted in 1979 and paid for by an employee who was concerned about radiological contamination. This individual contracted a private company to perform the assessment. The result of the investigation was that no contamination was detected. Mr. Lowpensky showed Tetra Tech employees the report but would not allow it be removed from the premise.

1030-1100 Bob Legallet met Tetra Tech employees outside of former Building 820 and had Tetra Tech employees follow him to former Building 815. Mr. Legallet manages the building, which is currently operated by Iron Mountain, a file/record storage facility. He accompanied Tetra Tech around the perimeter of the building and provided what information he could about the building's history. He pointed out the location of the two storm water holding tanks that were once used by the DoD to store radiological/medical waste generated from experiments conducted in the building. He also pointed out the former location of two underground storage tanks that were removed in the late 1990's by the land owner, Crisp, Inc. Mr. Legallet was unsure if the electrical substation located behind a fence along the east side of the building is within the property boundary.

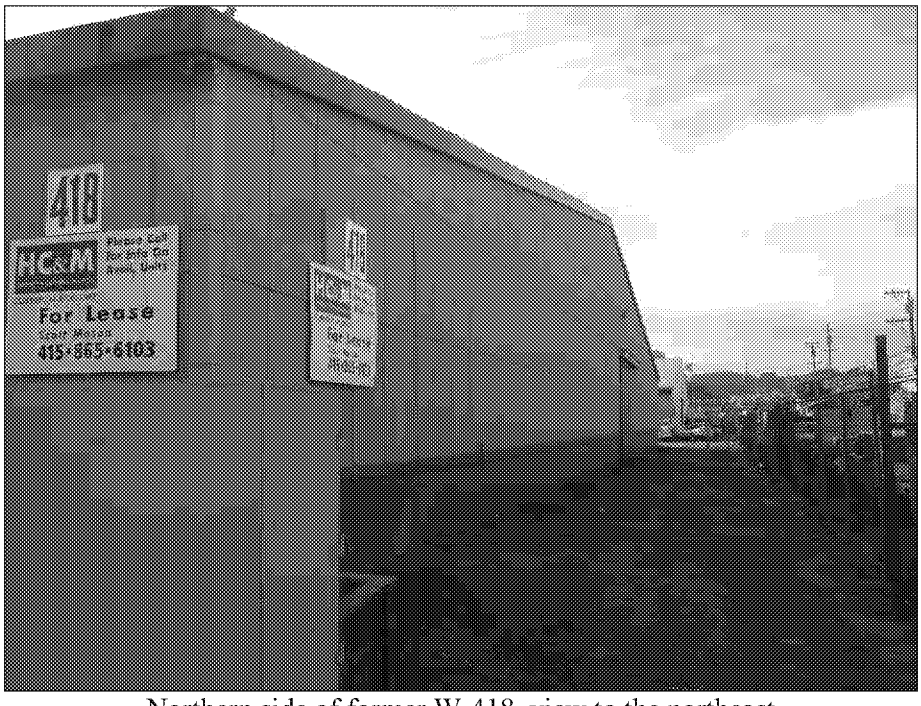
1100-1115 Ms. Henderson and Mr. Hamilton traveled to the San Francisco Housing Authority area of the Site located north of former Building 815. After getting the lay of the land, a picture of the Hunters Point Boys and Girls Club was taken. Soon after, the San Francisco Police inquired about what business Tetra Tech employees had in that neighborhood. They advised that they leave the area immediately because there have been a number of gang related shootings and would hate for anyone to get caught in the "cross fire." Ms. Henderson and Mr. Hamilton left the site.

1115-1230 Lunch.

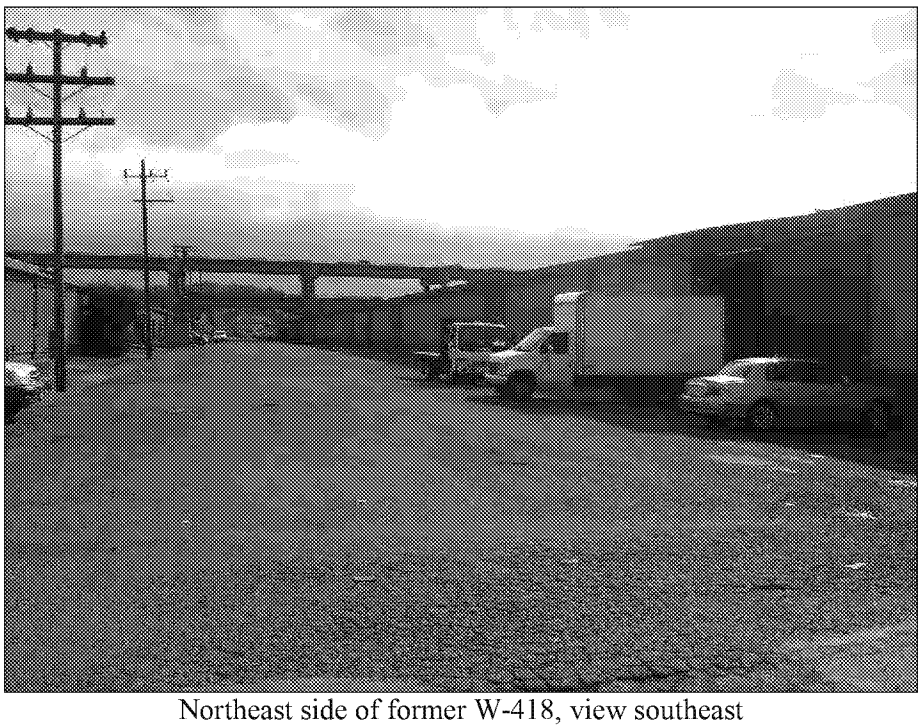
1230-1500 Tetra Tech employees visited the San Francisco Housing Authority in downtown San Francisco to review real estate records of the housing area that was visited. A grant deed and reference to numerous other real estate documents on record at the county Assessor's office were gathered.

1500-1730 Tetra Tech employees traveled back to the McClellan Park office.

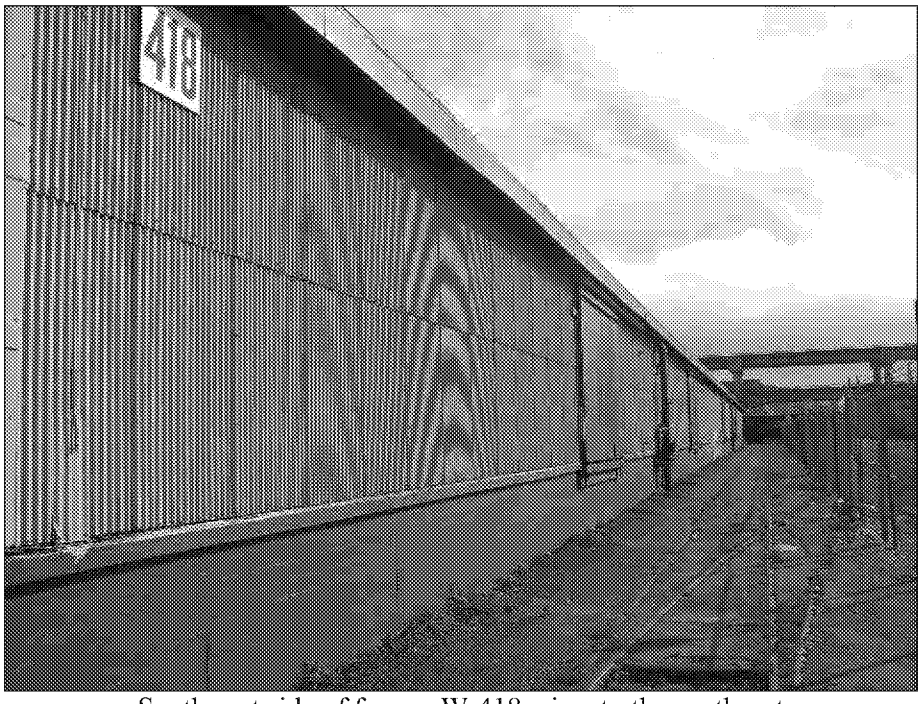
Pictures from the Site visits are provided below. Also provided are photographs of the storm water storage tanks taken from a Site visit conducted on 13 May 2003 by the US Army Corps of Engineers.



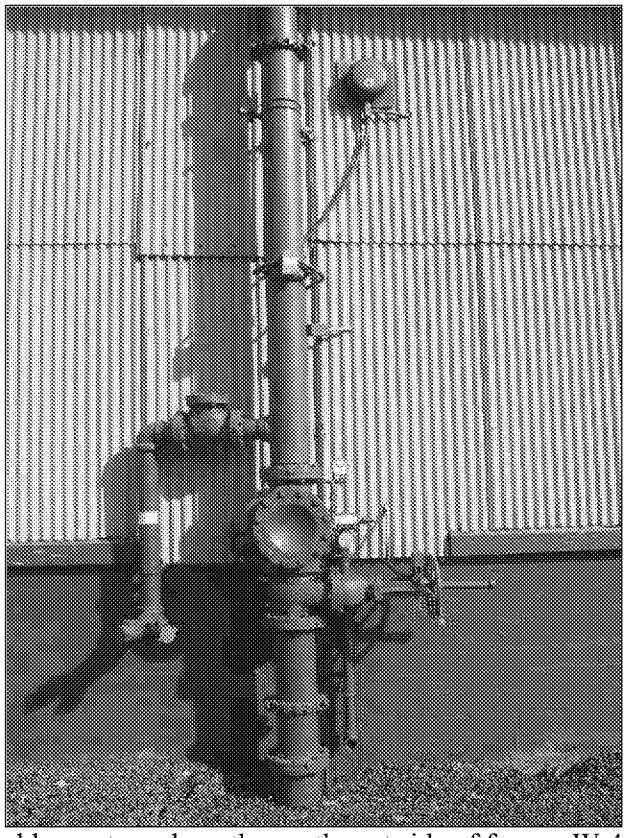
Northern side of former W-418, view to the northeast



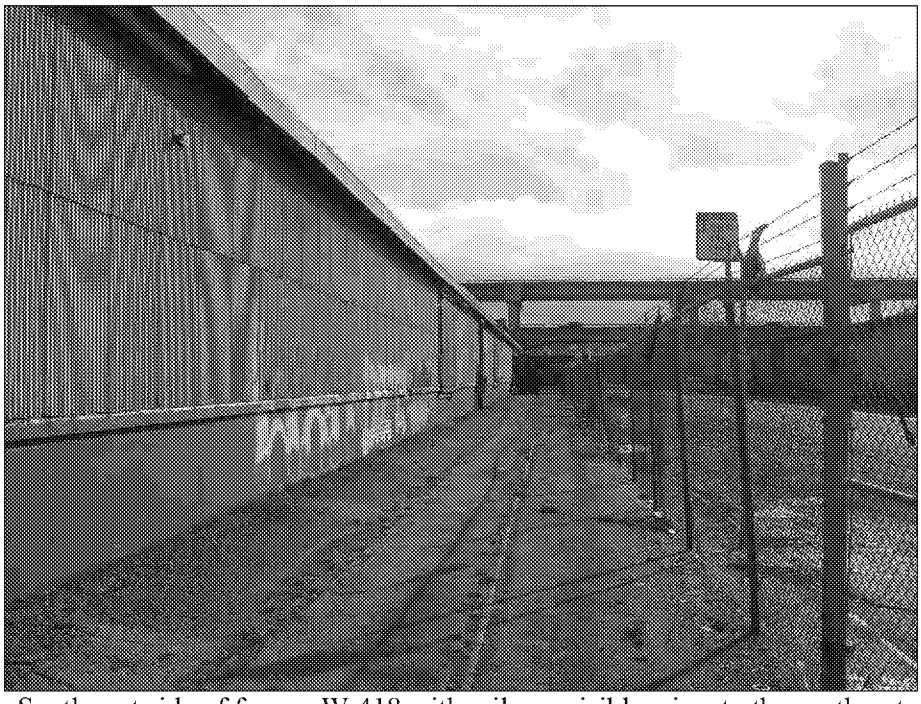
Northeast side of former W-418, view southeast



Southwest side of former W-418, view to the southeast

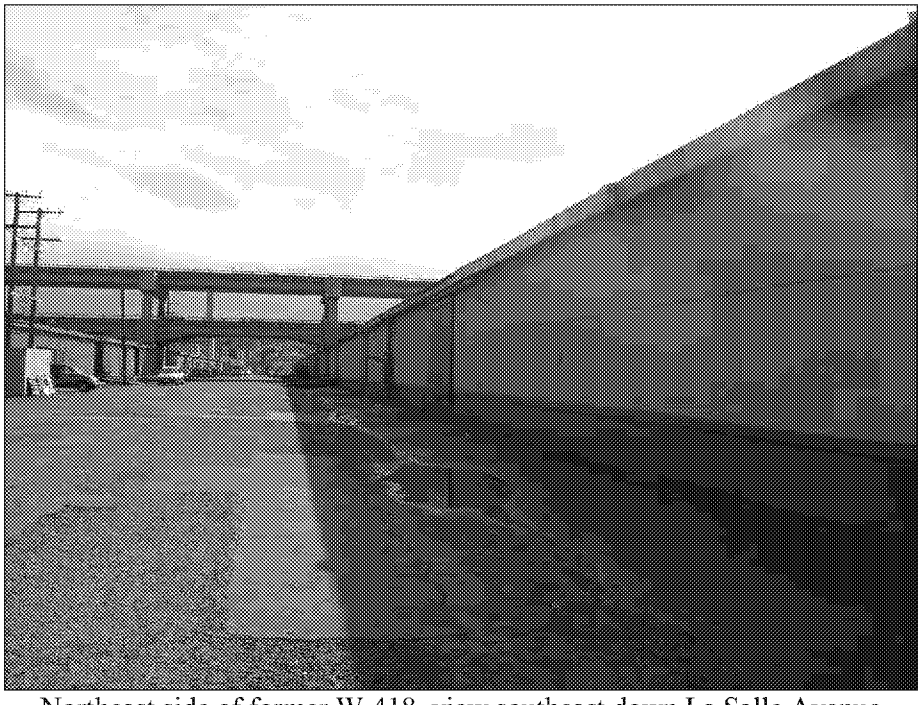


Water supply to fire sprinkler system along the southwest side of former W-418, view to the northeast

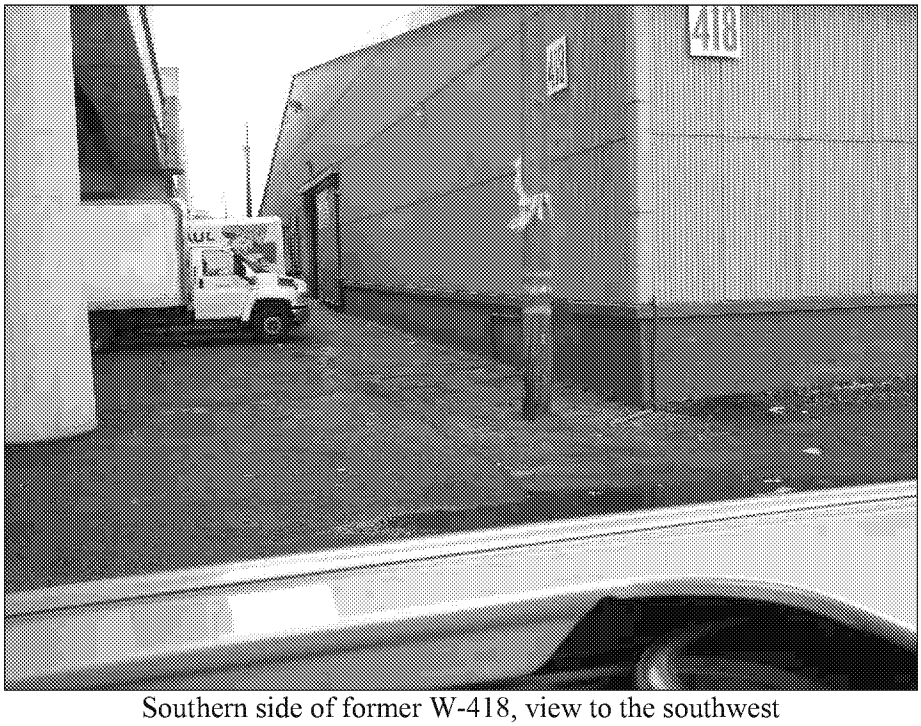


Southwest side of former W-418 with railway visible, view to the southeast

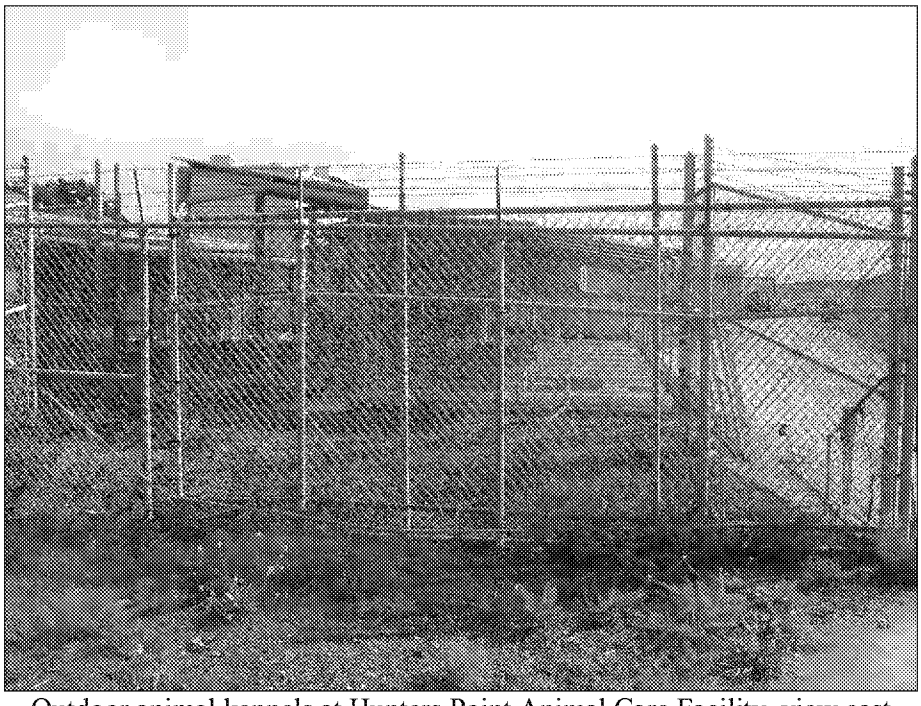
Northern corner of former W-418 showing Discount Builders (current tenant) signage, view northeast



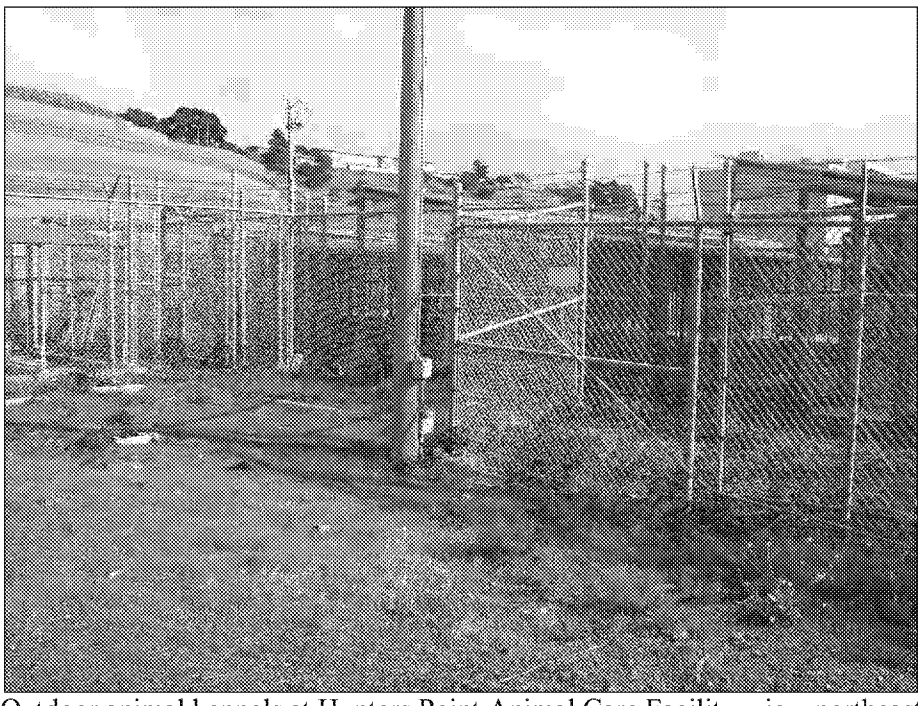
Northeast side of former W-418, view southeast down La Salle Avenue



Southern side of former W-418, view to the southwest



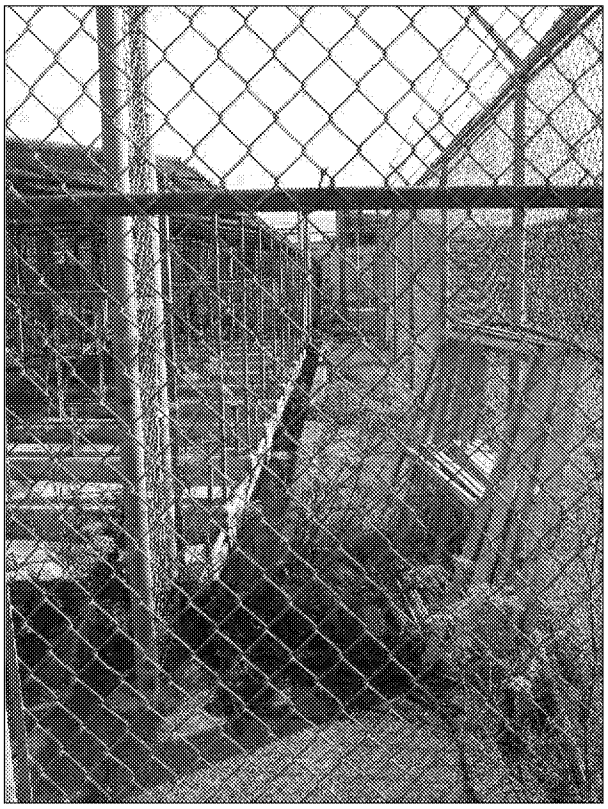
Outdoor animal kennels at Hunters Point Animal Care Facility, view east



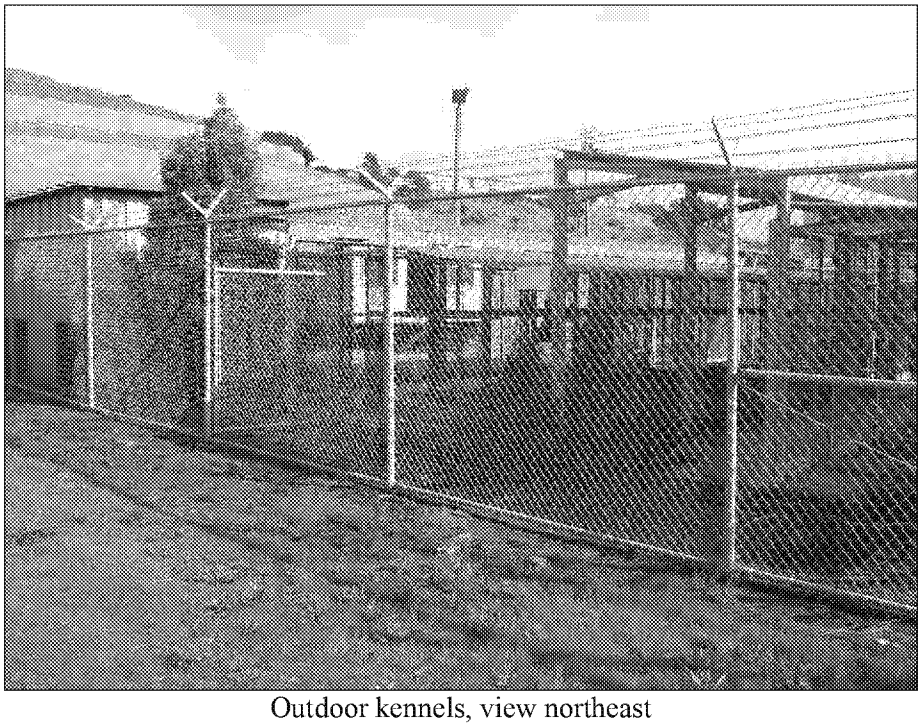
Outdoor animal kennels at Hunters Point Animal Care Facility, view northeast

Monitoring well adjacent to the kennels, view northeast

Outdoor kennels, view north

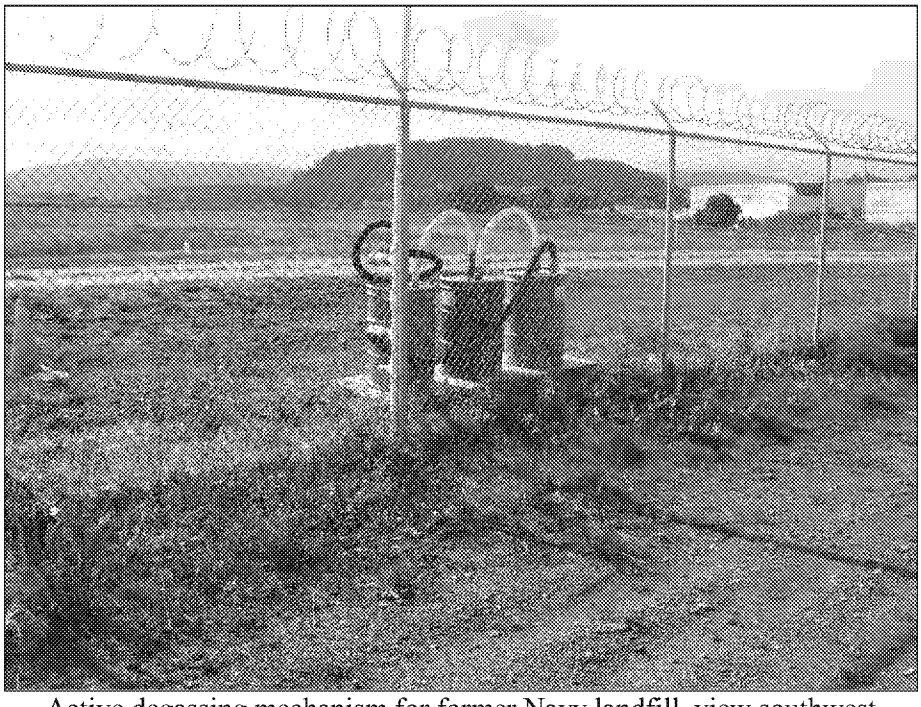


Outdoor kennels, view west

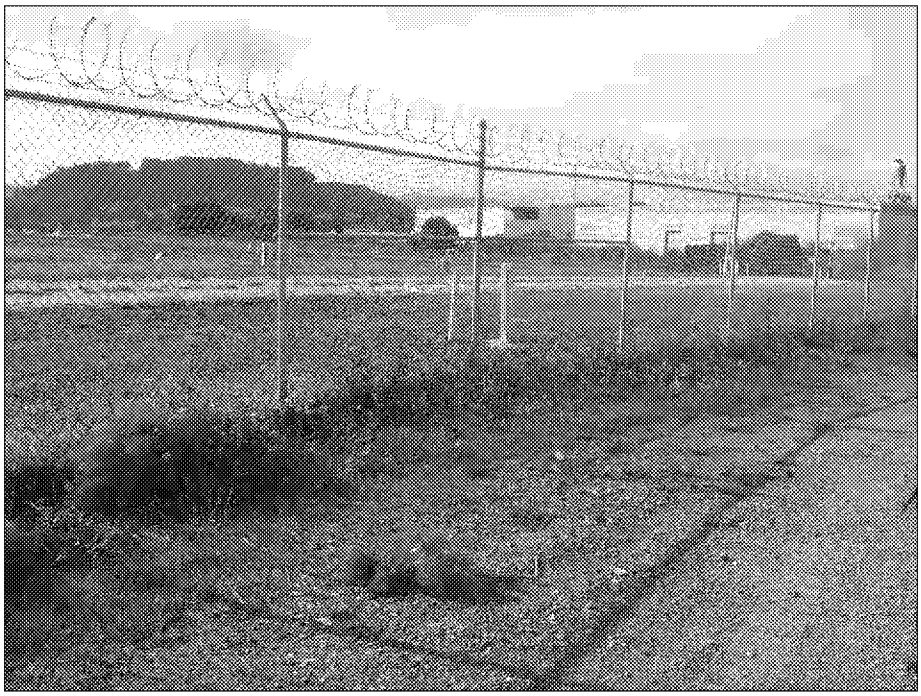


Outdoor kennels, view northeast

UCSF property line fence in foreground, monitoring well and former Navy landfill in background, view south



Active degassing mechanism for former Navy landfill, view southwest



UCSF property boundary fence and monitoring well off-Site on former Navy landfill, view southwest

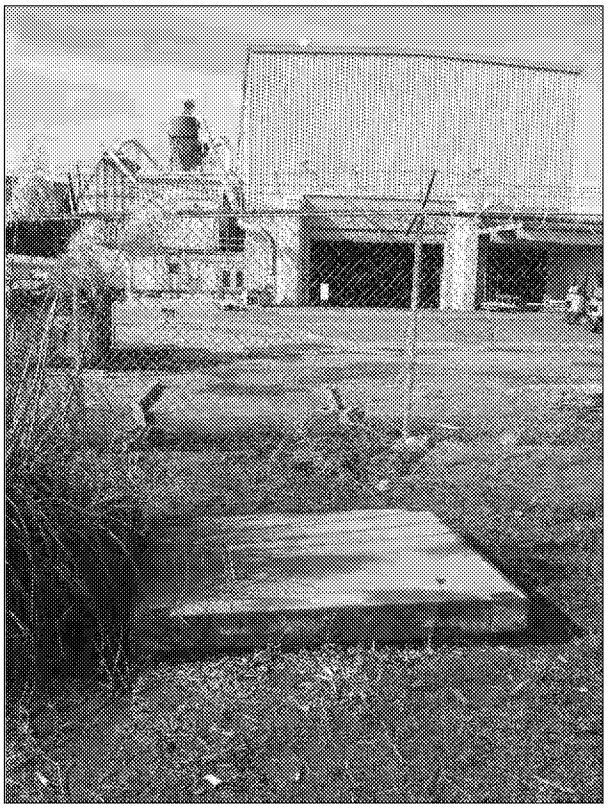
Monitoring well adjacent to storage lockers owned by the UCSF, view north

Storage lockers owned by UCSF Hunters Point Animal Care Facility, view south

Additional degassing mechanism for former Navy landfill, view south

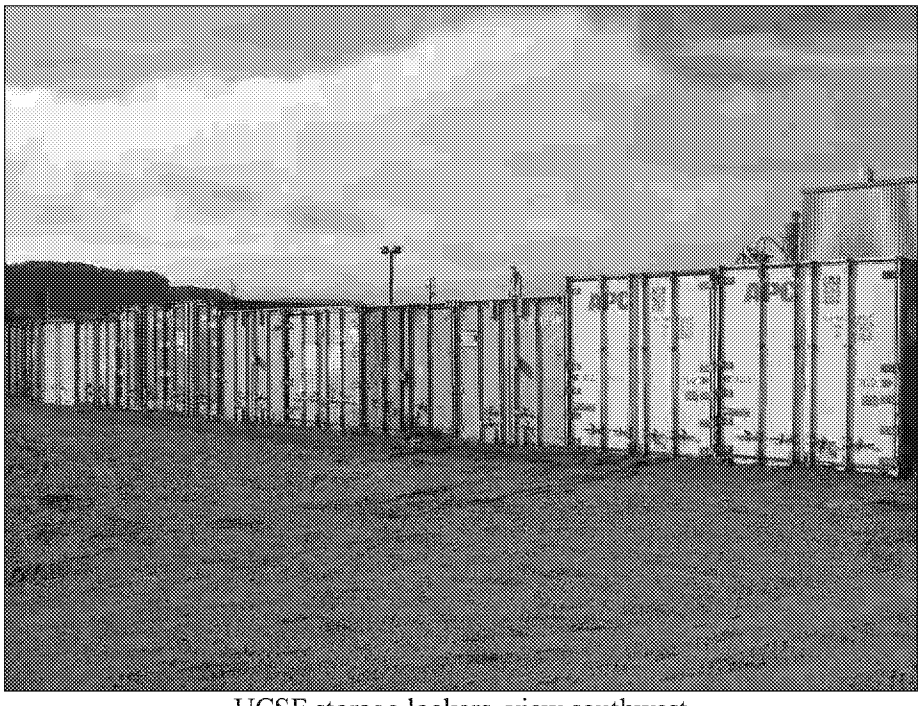
Southwestern corner of UCSF property boundary, view southwest

Monitoring well adjacent to storage magazines, view north

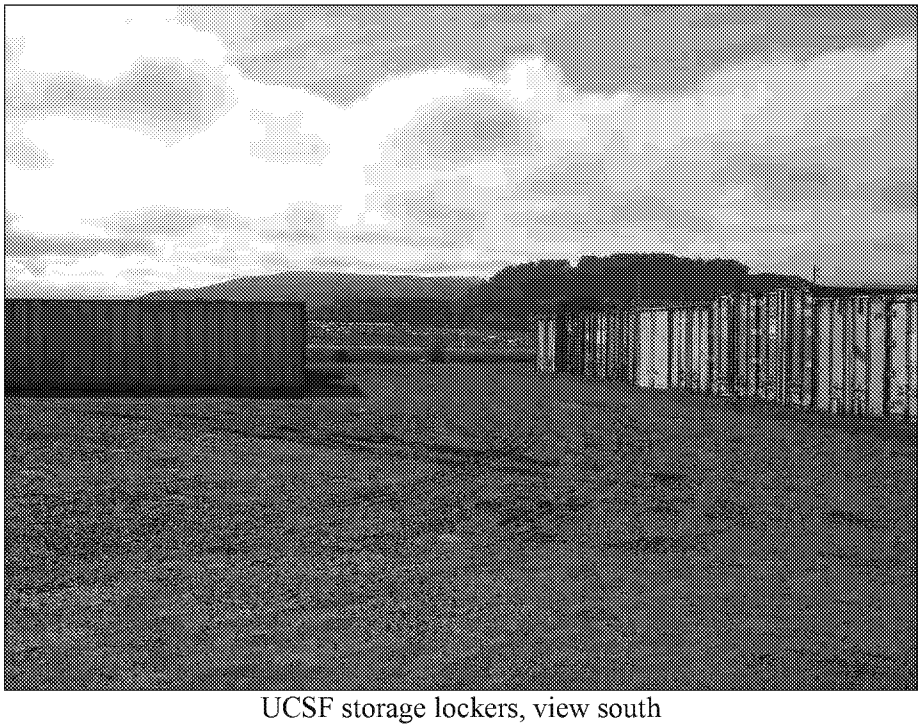


Western UCSF property boundary adjacent to Lowpensky Moulding Facility, view west

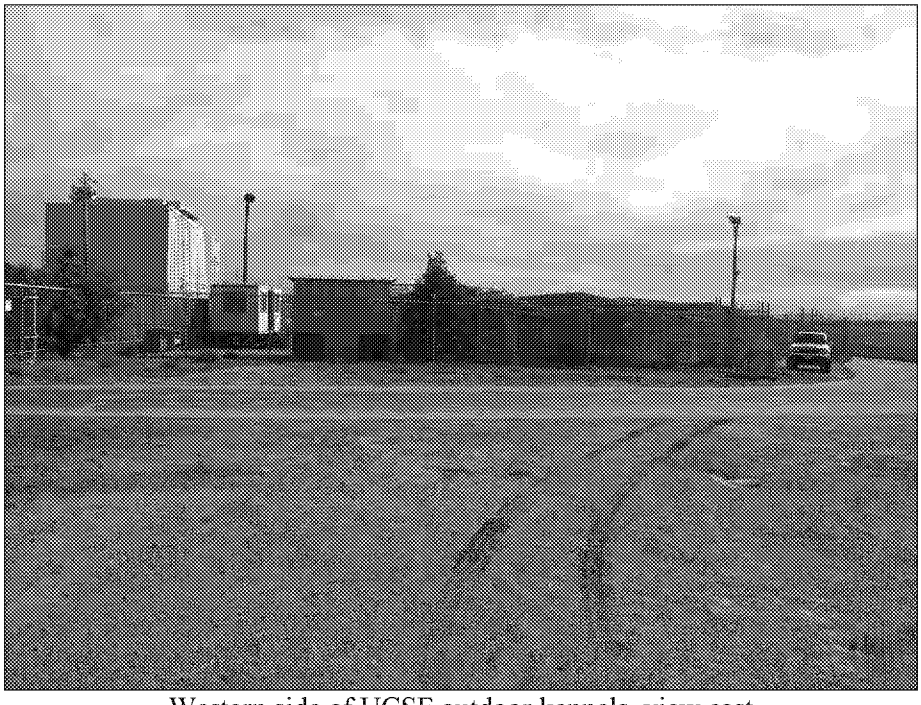
Northern side of UCSF property with Lowpensky Moulding Facility in background, view west



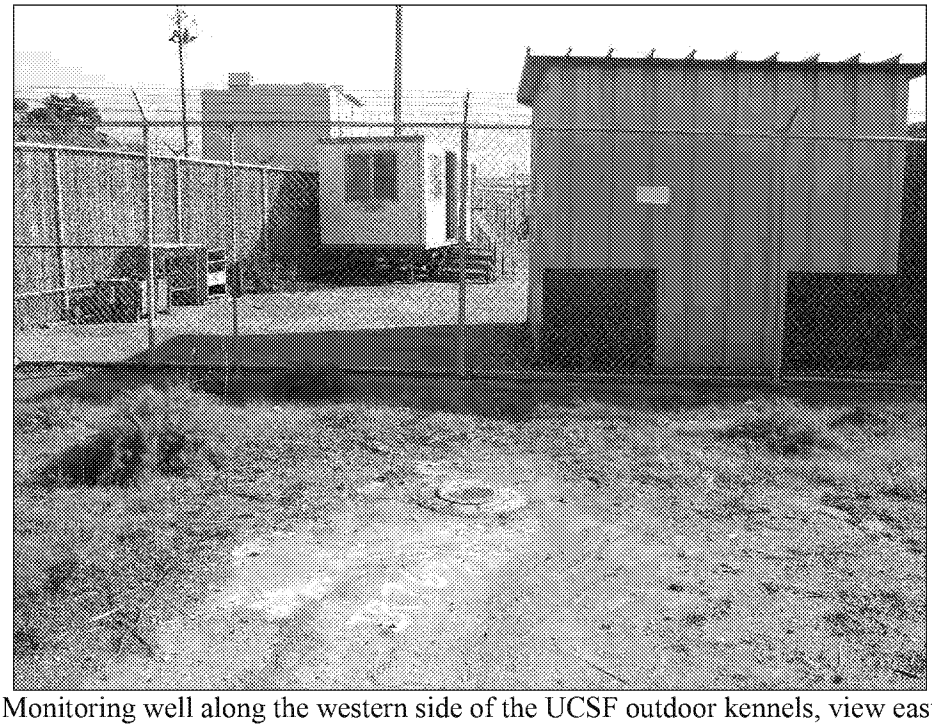
UCSF storage lockers, view southwest



UCSF storage lockers, view south



Western side of UCSF outdoor kennels, view east



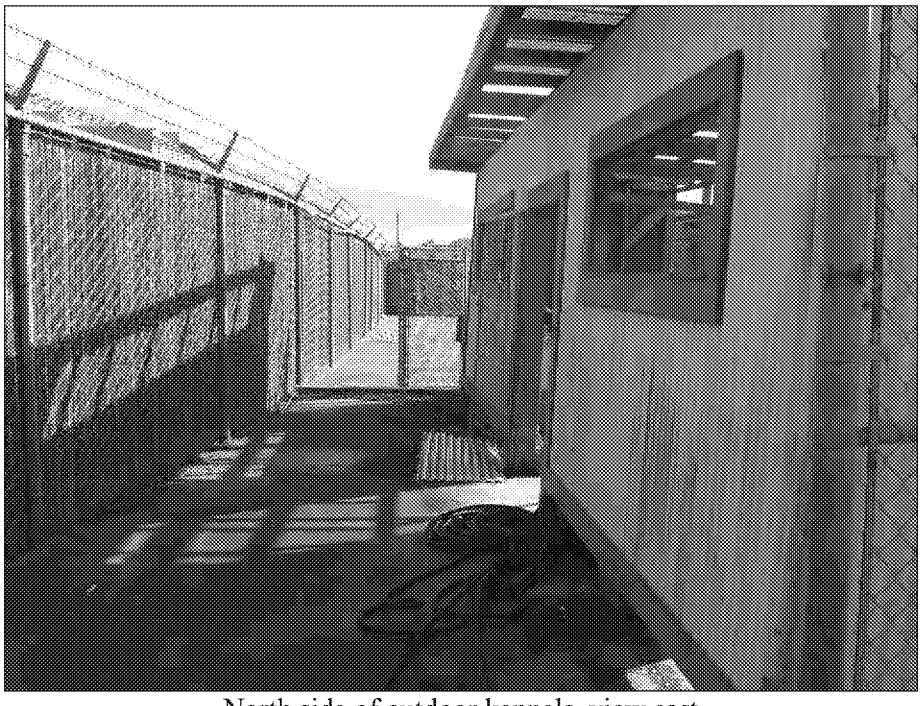
Monitoring well along the western side of the UCSF outdoor kennels, view east

Monitoring well labeled "IR76-M" along the western side of UCSF outdoor kennels, view north

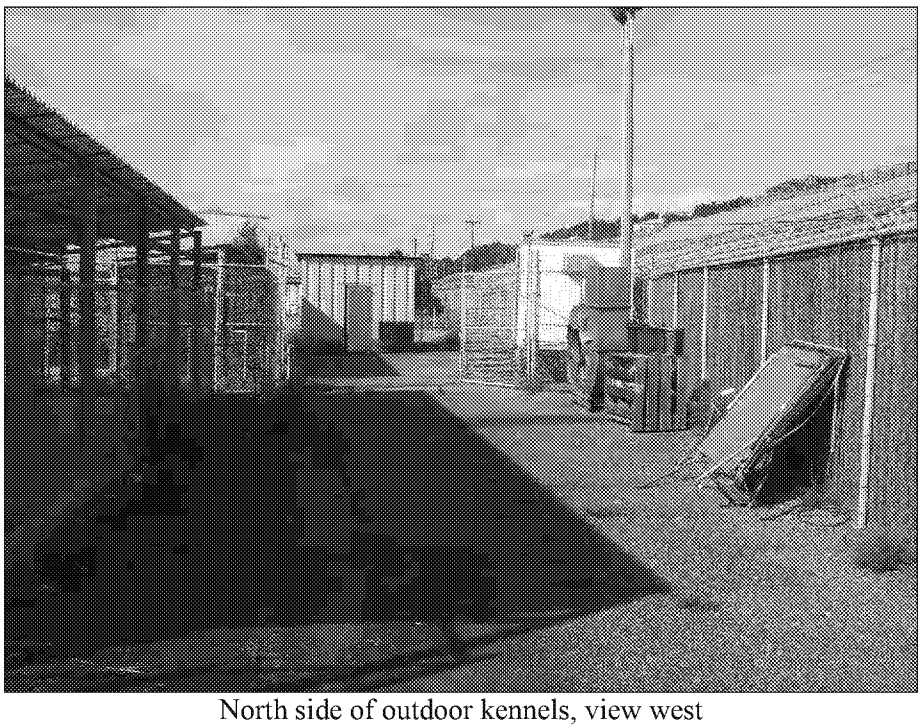
Close-up of monitoring well along the western side of UCSF outdoor kennels, view vertical

Southside of former Building 831, view southeast

Monitoring well between UCSF kennel buildings, view north



North side of outdoor kennels, view east



North side of outdoor kennels, view west

Water supply to outdoor kennels, view south

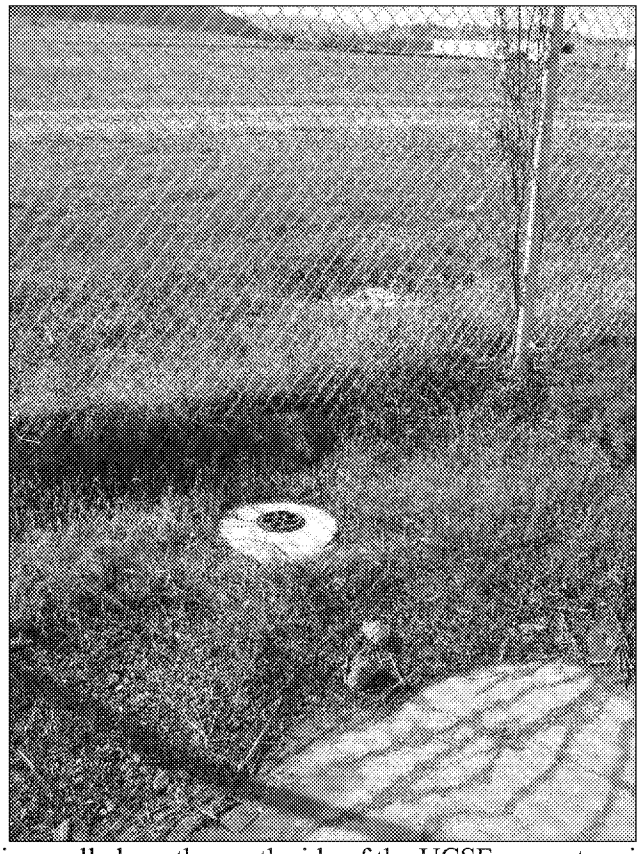
Close-up of water supply to outdoor kennels, view southwest

Outdoor kennels, view south

Fire hydrant along south side of former Building 831, view northeast

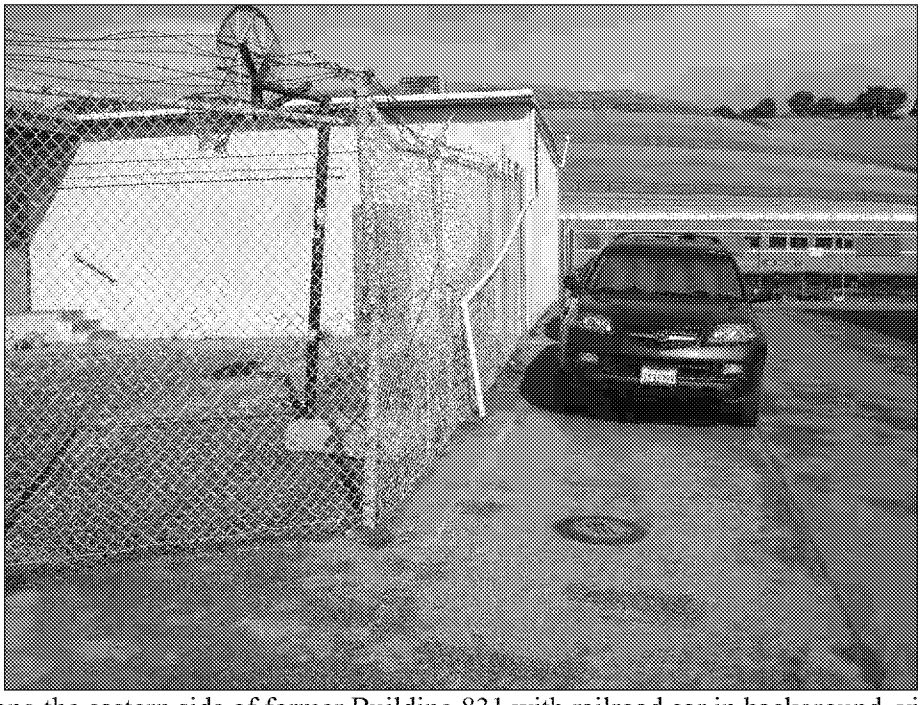
South side of former Building 831, view northwest

Road along the south side of the UCSF property, view east

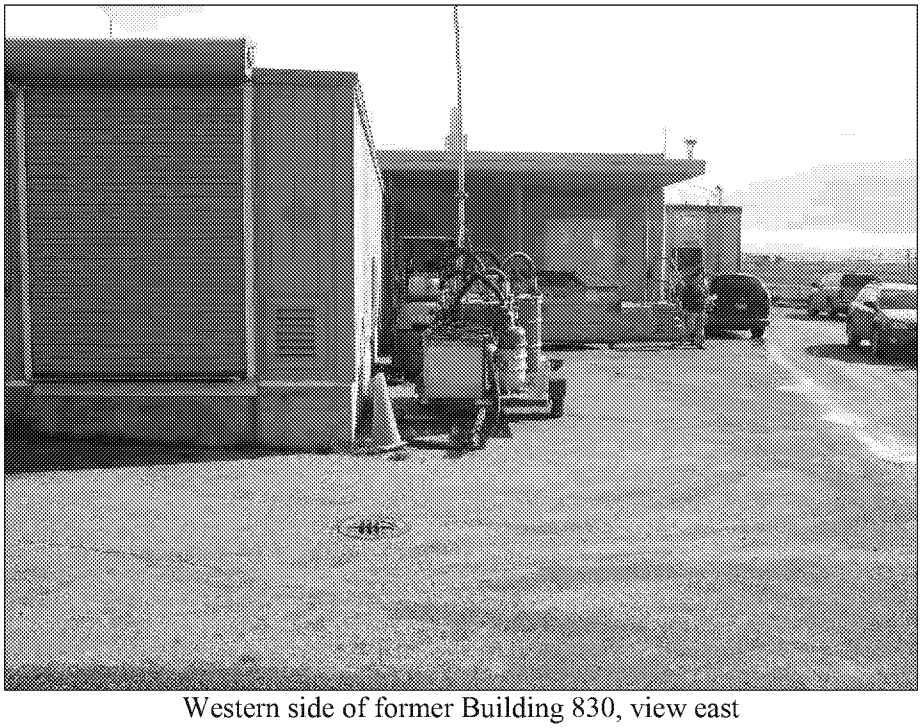


Monitoring well along the south side of the UCSF property, view south

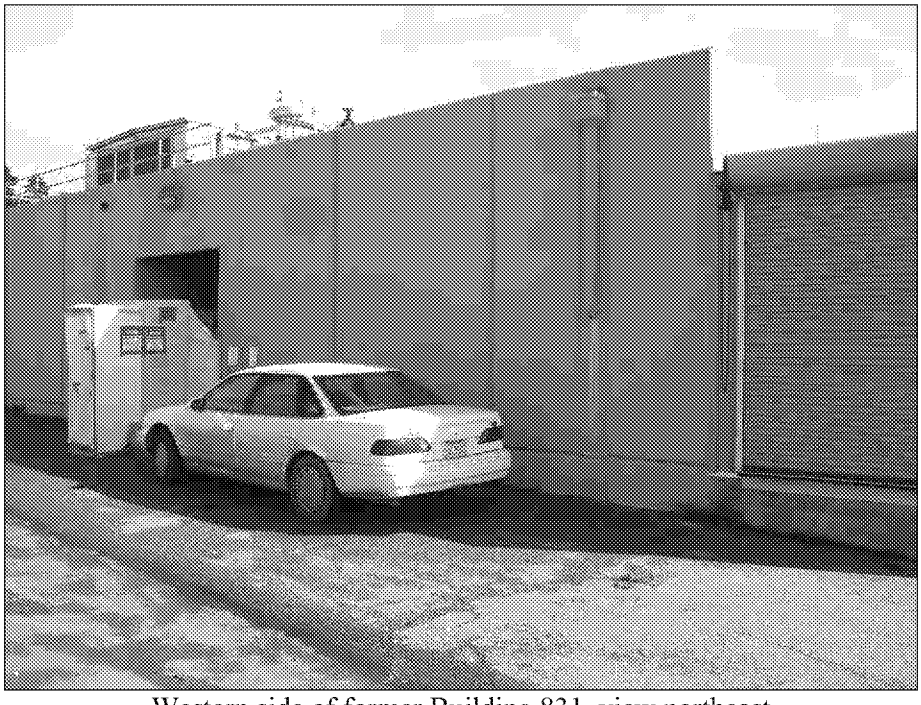
Portion of former Building 831, view north



Alley along the eastern side of former Building 831 with railroad car in background, view north

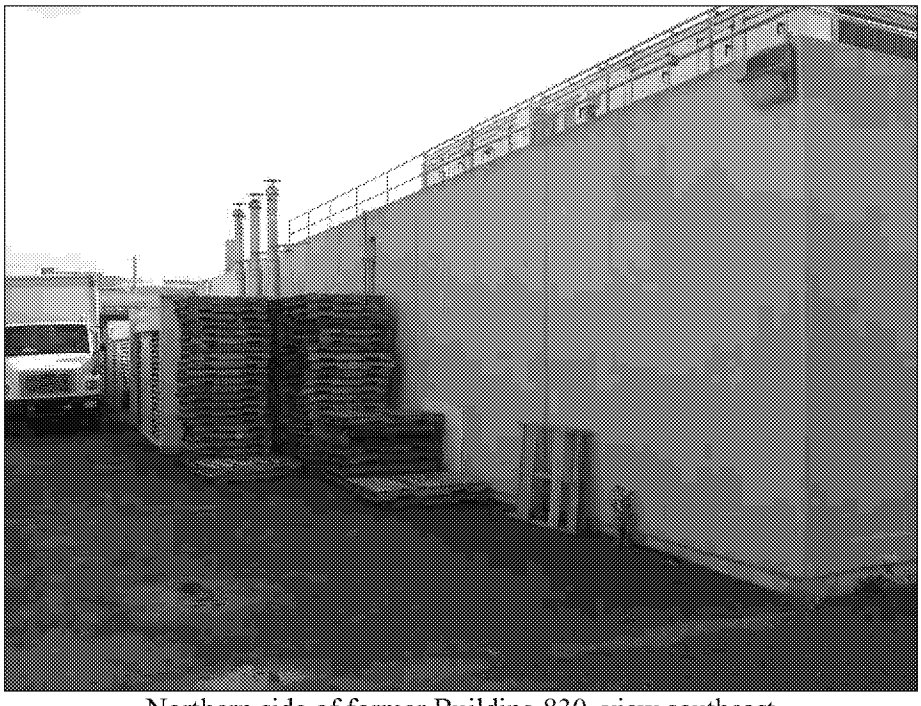


Western side of former Building 830, view east

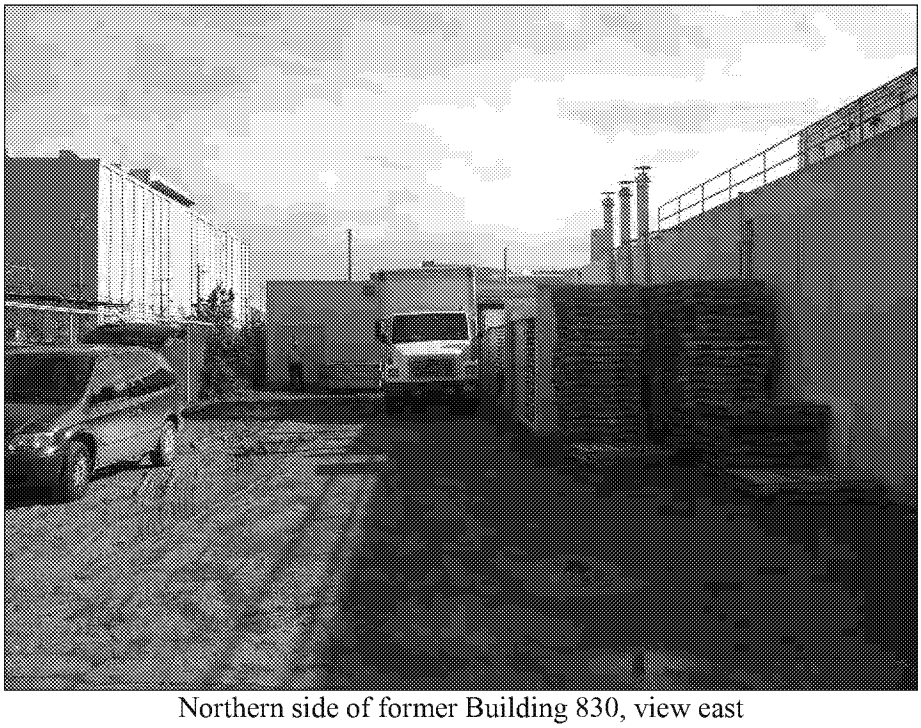


Western side of former Building 831, view northeast

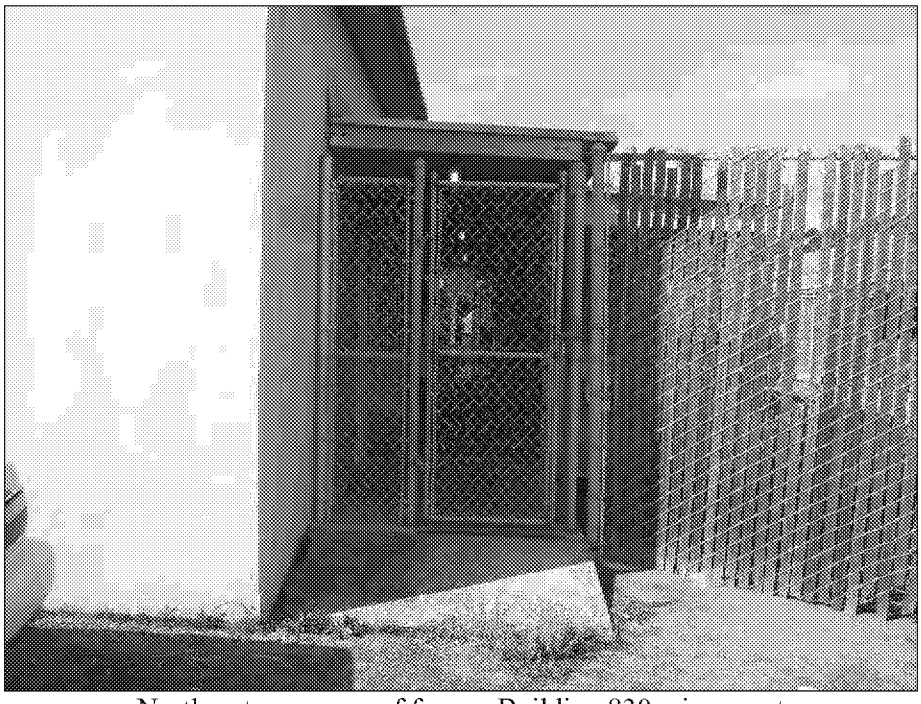
Asbestos abatement in progress along the western side of former Building 830, view east



Northern side of former Building 830, view southeast



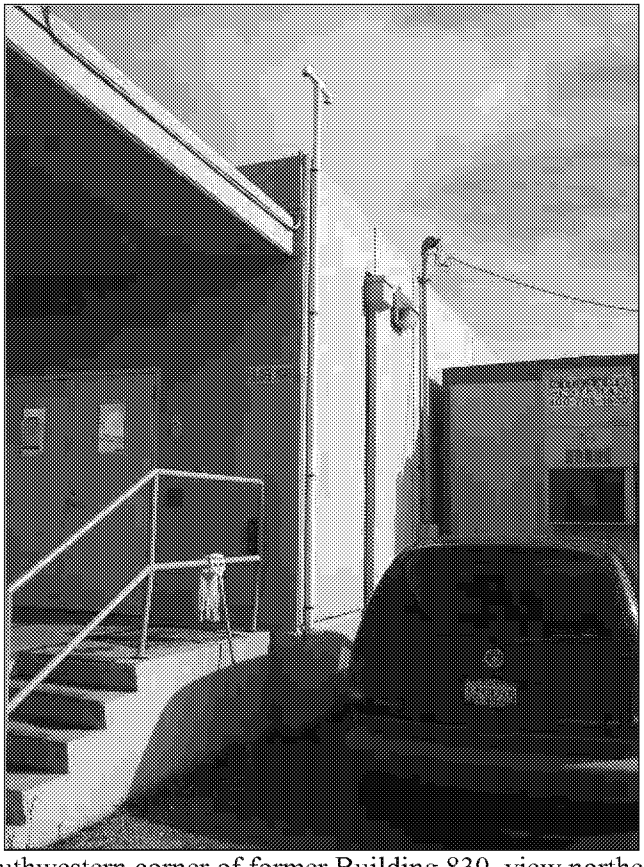
Northern side of former Building 830, view east



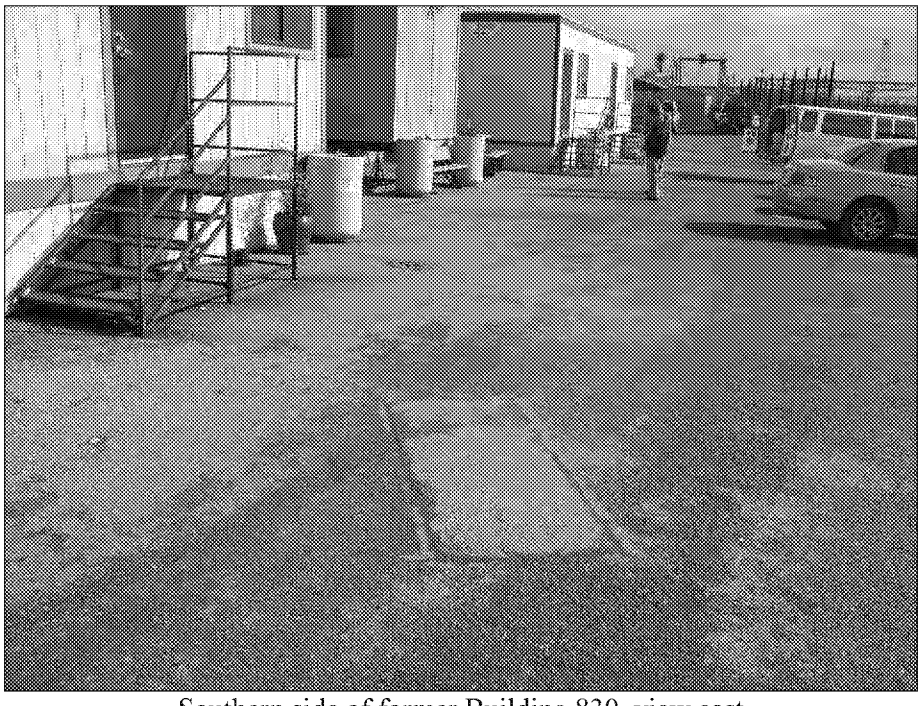
Northeastern corner of former Building 830, view west

Garbage collection cans along the eastern side of former Building 830, view north

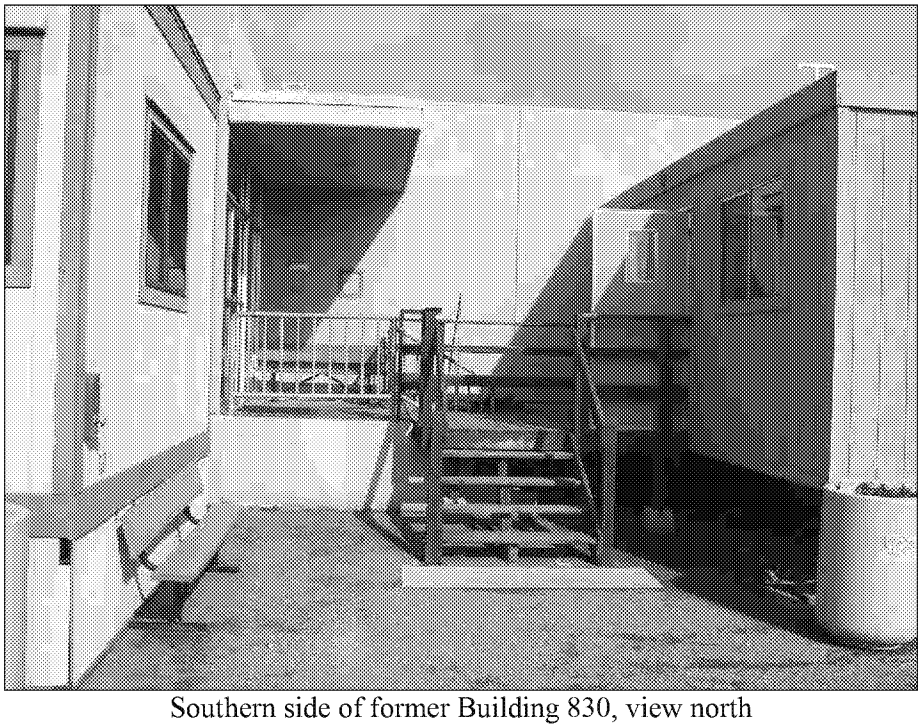
Southwestern corner of former Building 830 with air-conditioning unit, view north



Southwestern corner of former Building 830, view northeast

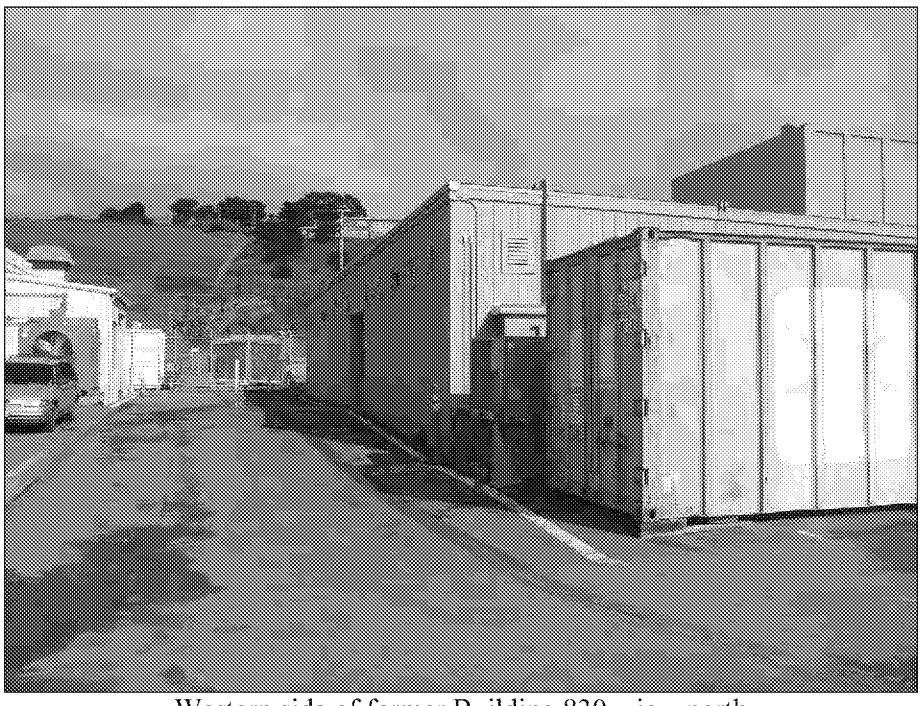


Southern side of former Building 830, view east



Southern side of former Building 830, view north

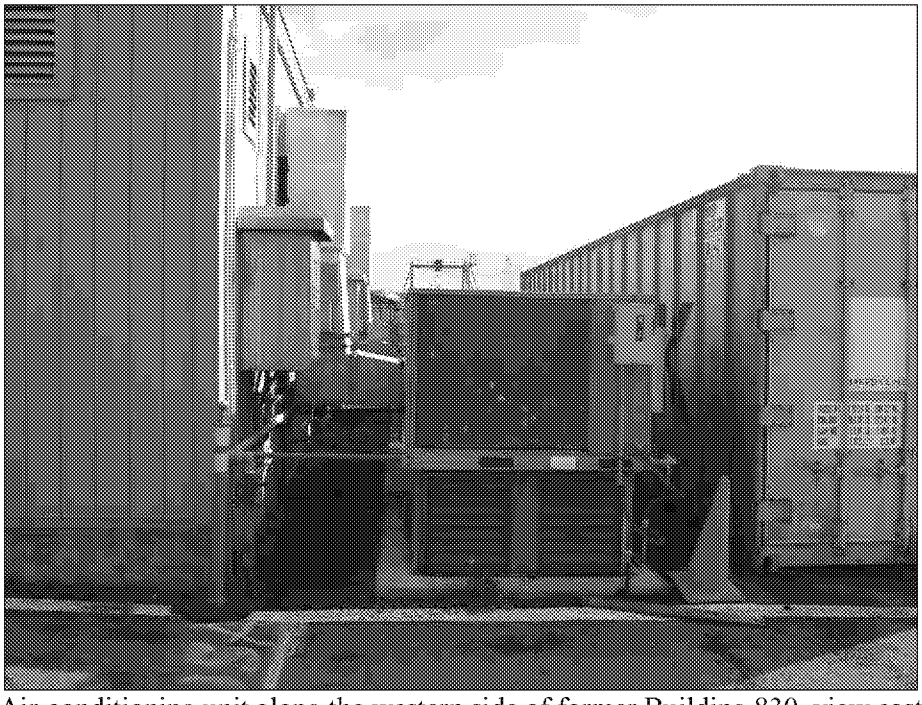
Southern side of former Building 830 with air-conditioning units, view north



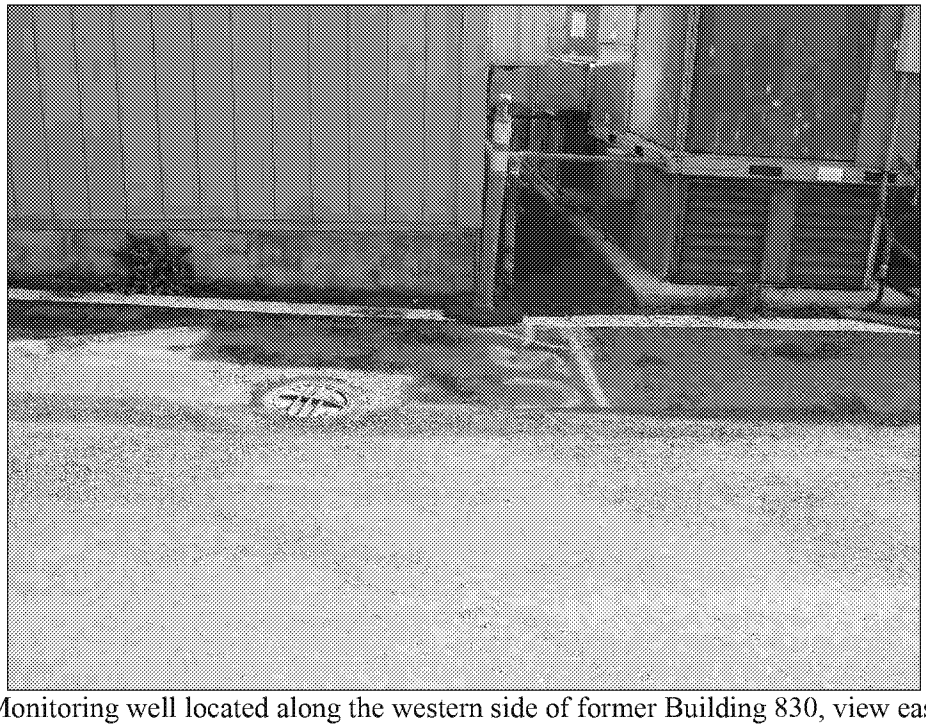
Western side of former Building 830, view north

Eastern side of former Building 830, view north

Eastern side of former Building 830, view north

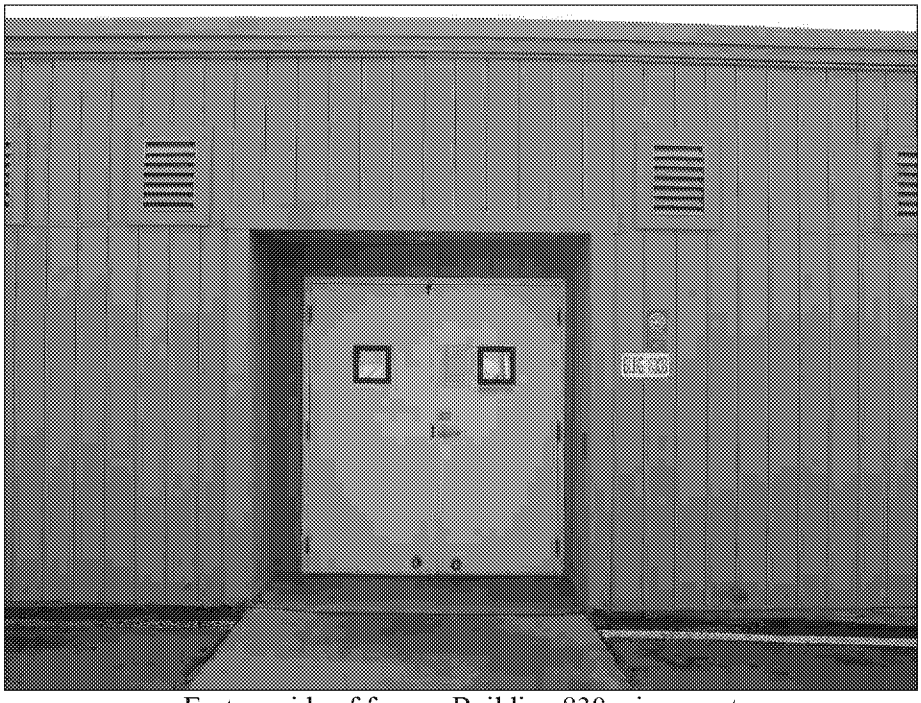


Air-conditioning unit along the western side of former Building 830, view east



Monitoring well located along the western side of former Building 830, view east

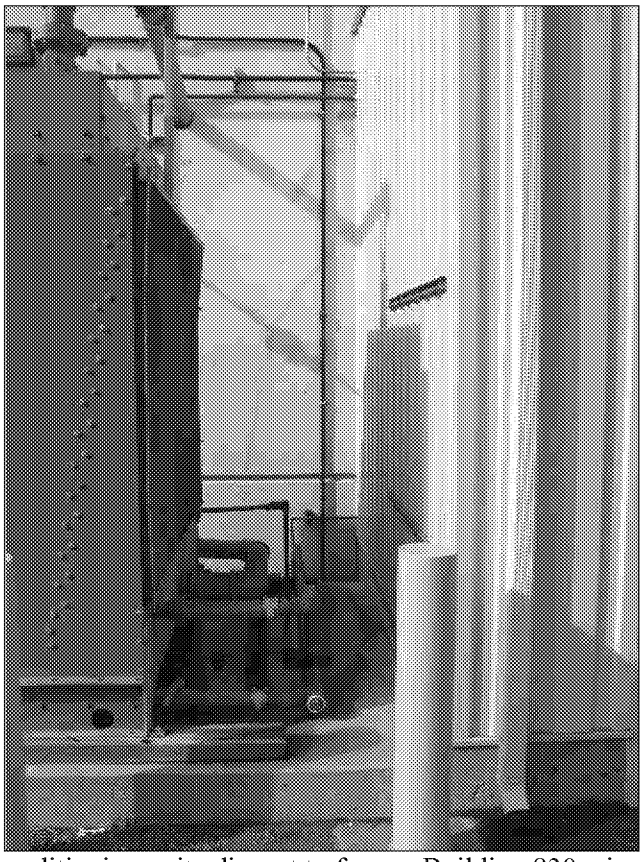
Western side of former Building 830, view east



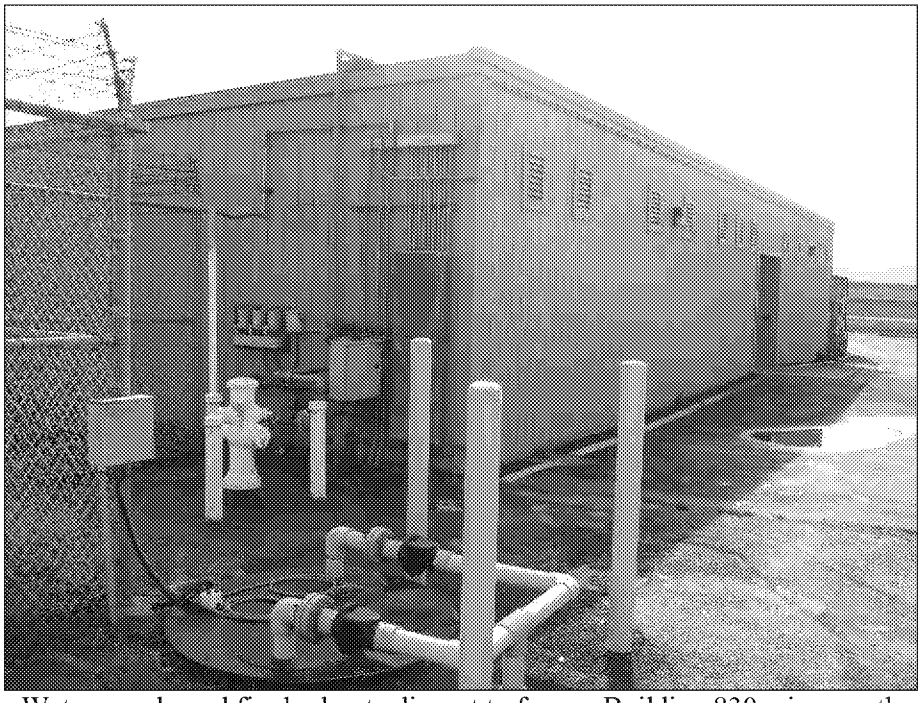
Eastern side of former Building 830, view west

Entrance door to former Building 830, view northeast

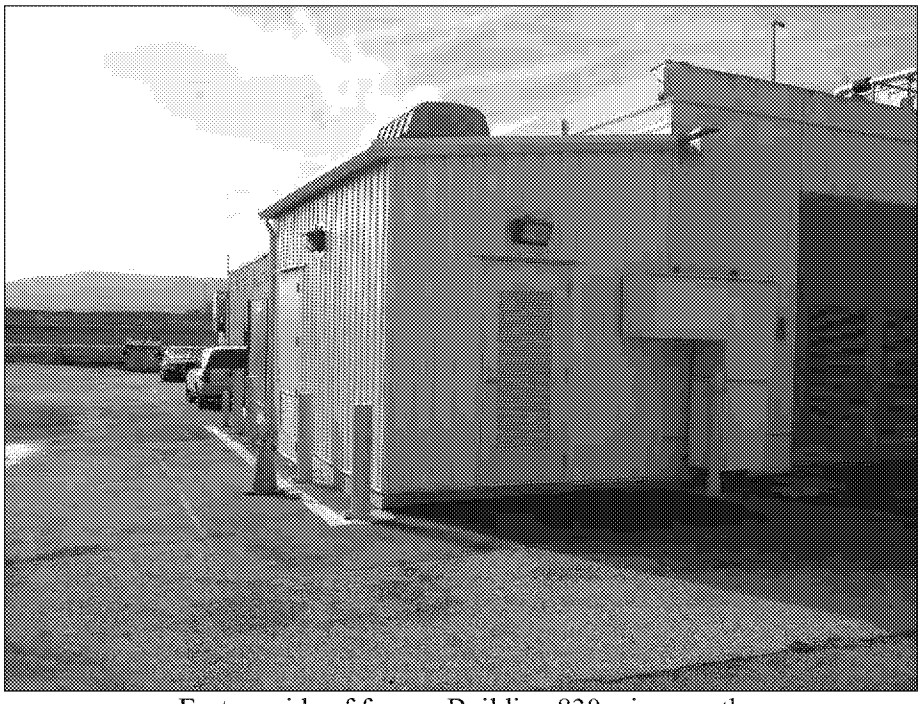
Water supply pump into former Building 830, view east



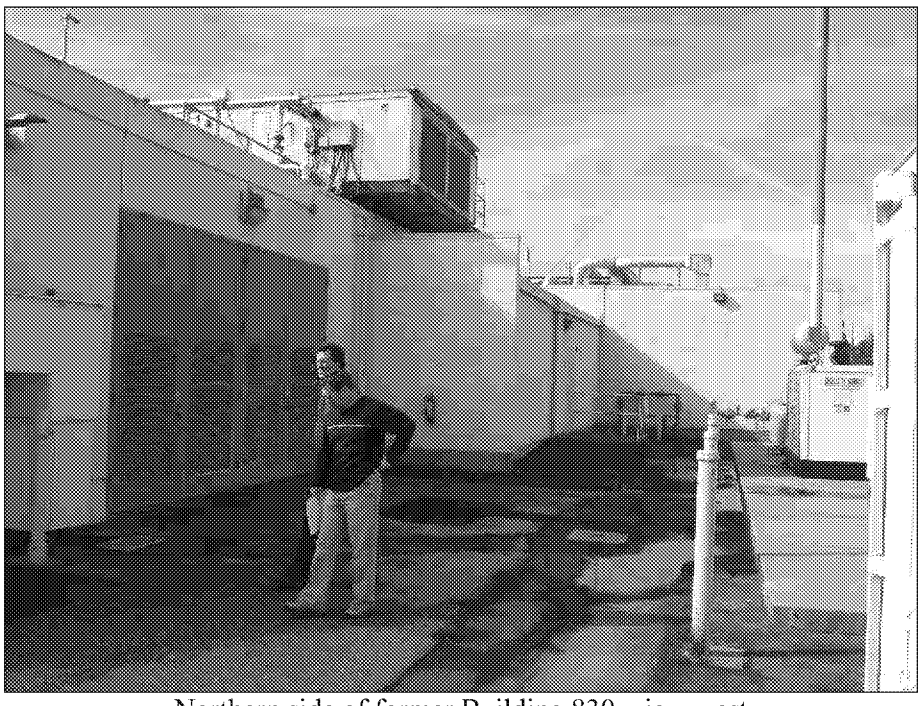
Air-conditioning unit adjacent to former Building 830, view east



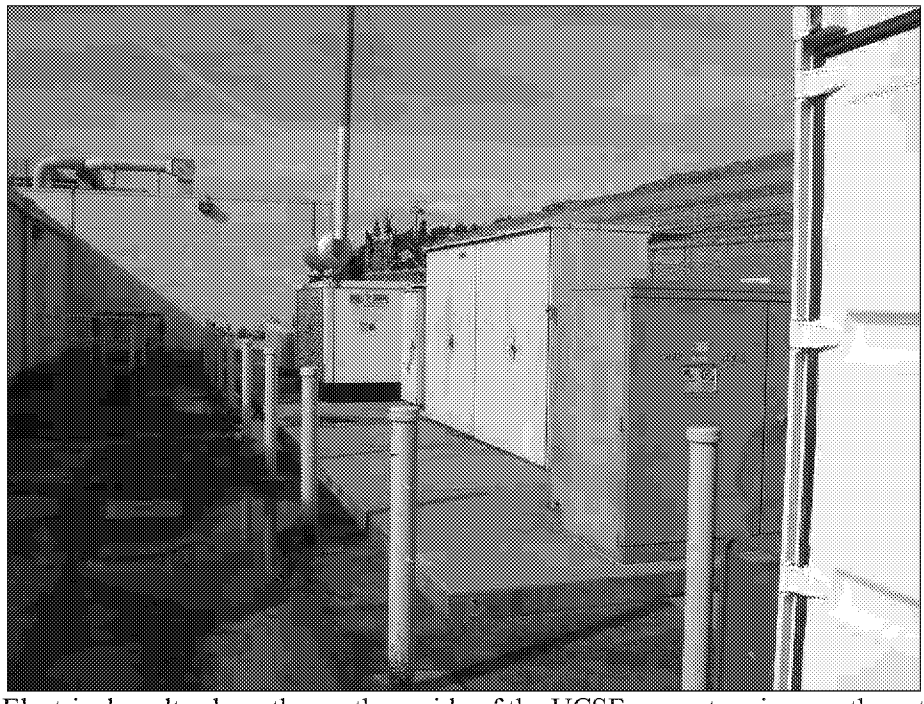
Water supply and fire hydrant adjacent to former Building 830, view south



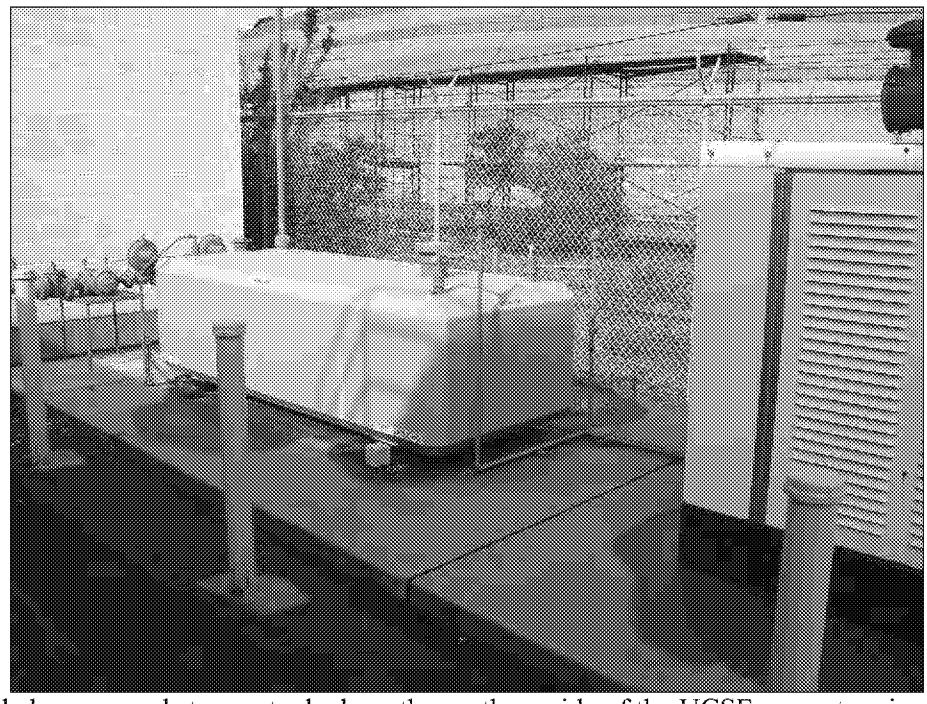
Eastern side of former Building 830, view south



Northern side of former Building 830, view west



Electrical vaults along the northern side of the UCSF property, view northwest



Diesel aboveground storage tank along the northern side of the UCSF property, view north

Potable water supply lines leading into former Building 830, view west

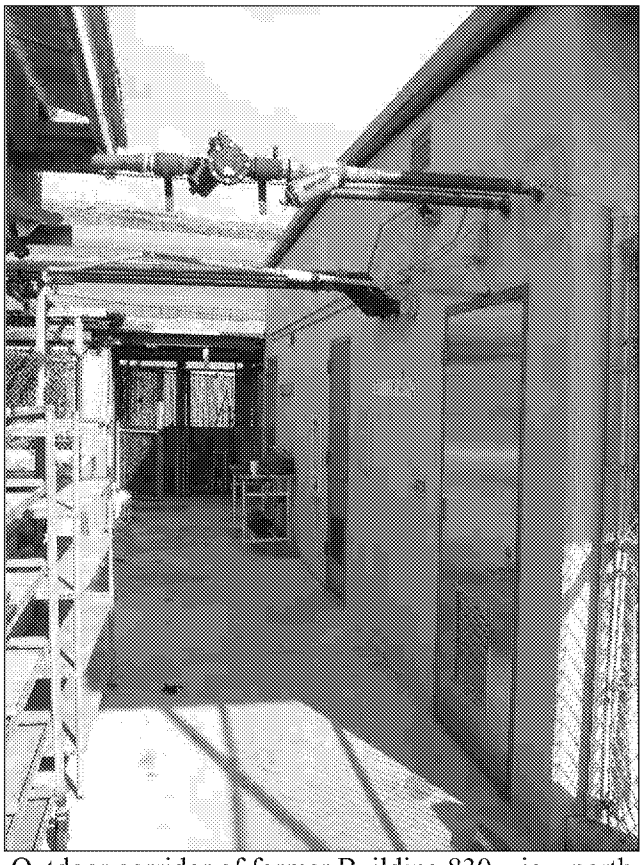
Diesel aboveground storage tank supply lines leading into former Building 830, view northwest

Diesel aboveground storage tank, view north

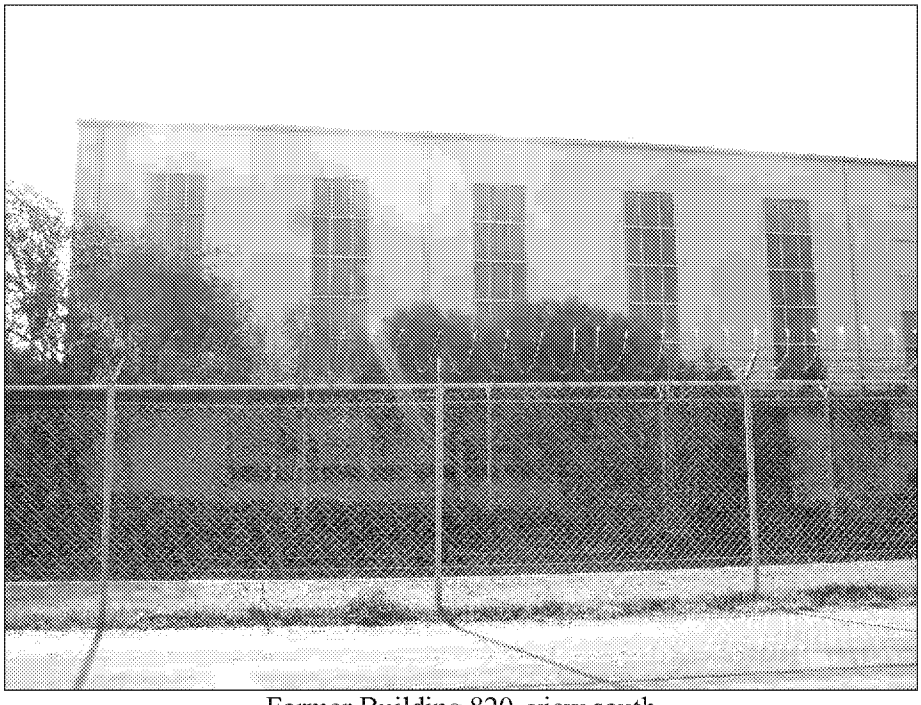
Electrical equipment storage closet, view west

Electrical equipment storage along northern boundary of UCSF property, view west

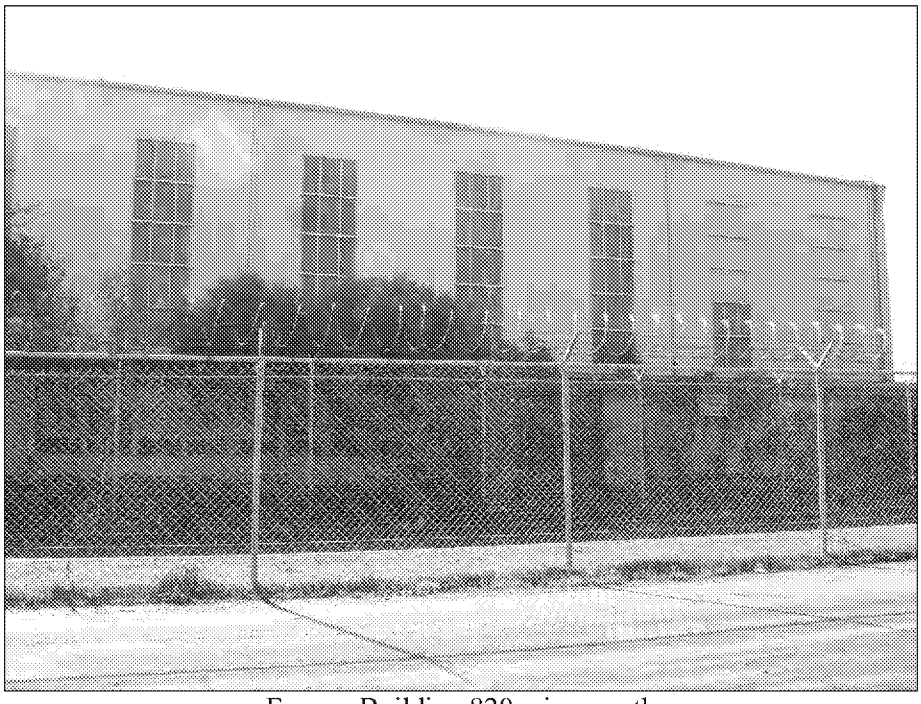
Northern side of former Building 830, view southwest



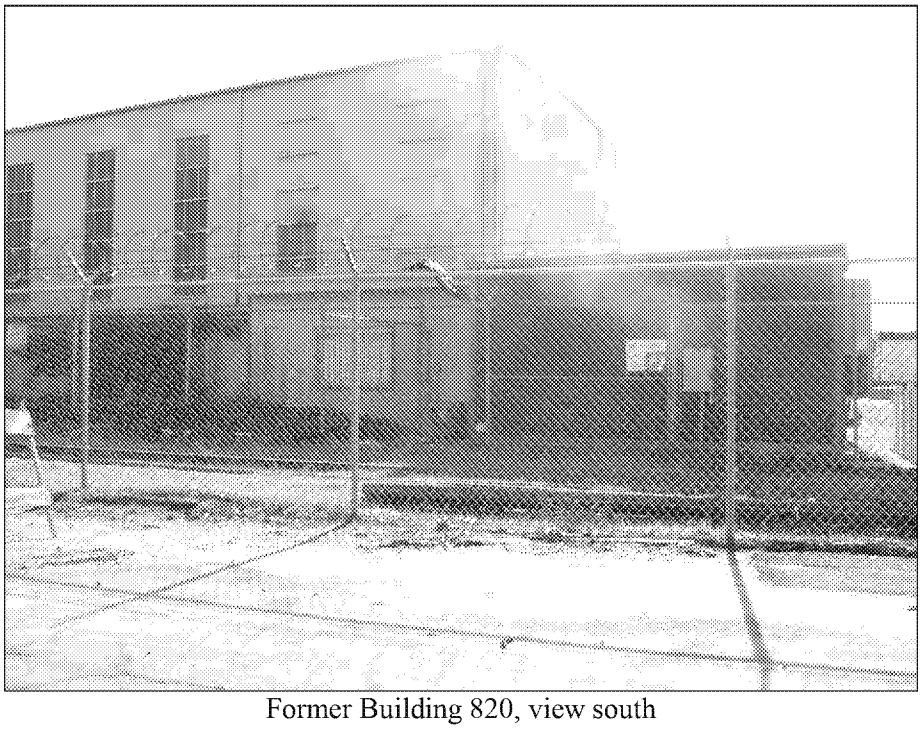
Outdoor corridor of former Building 830, view north



Former Building 820, view south

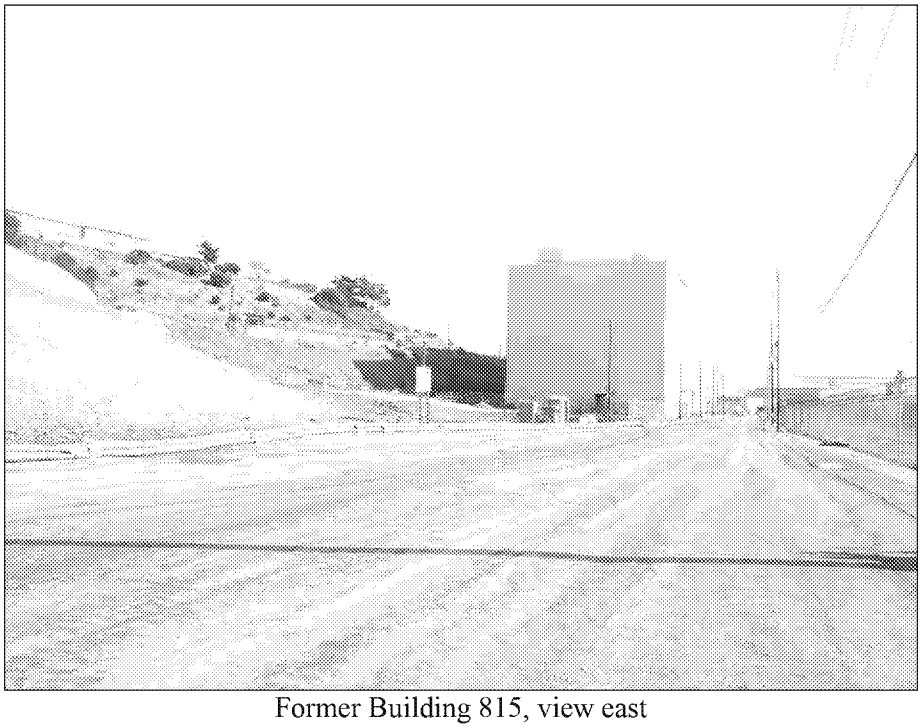


Former Building 820, view south

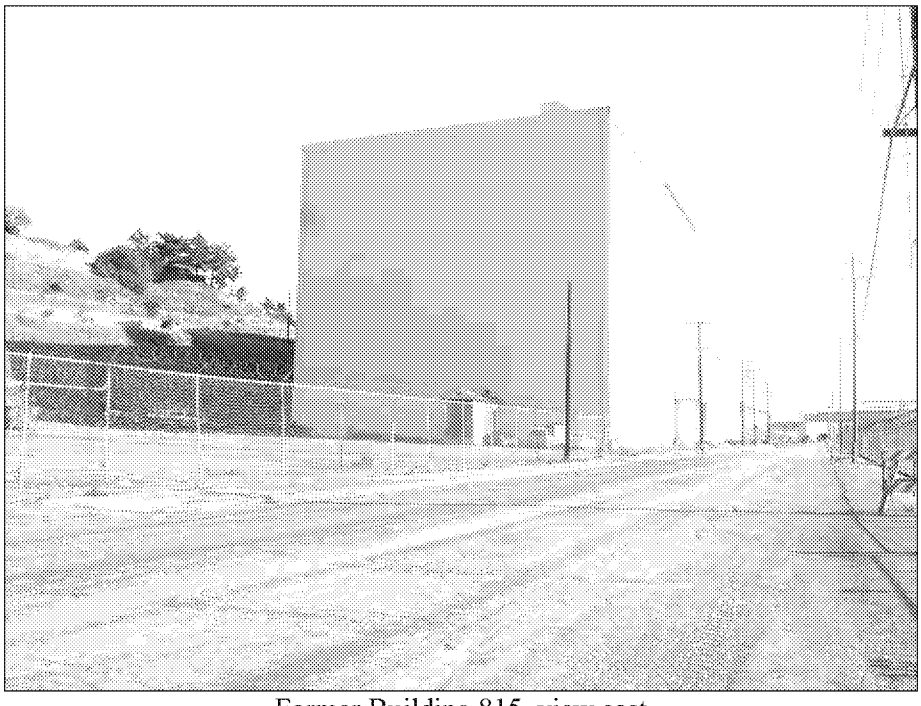


Former Building 820, view south

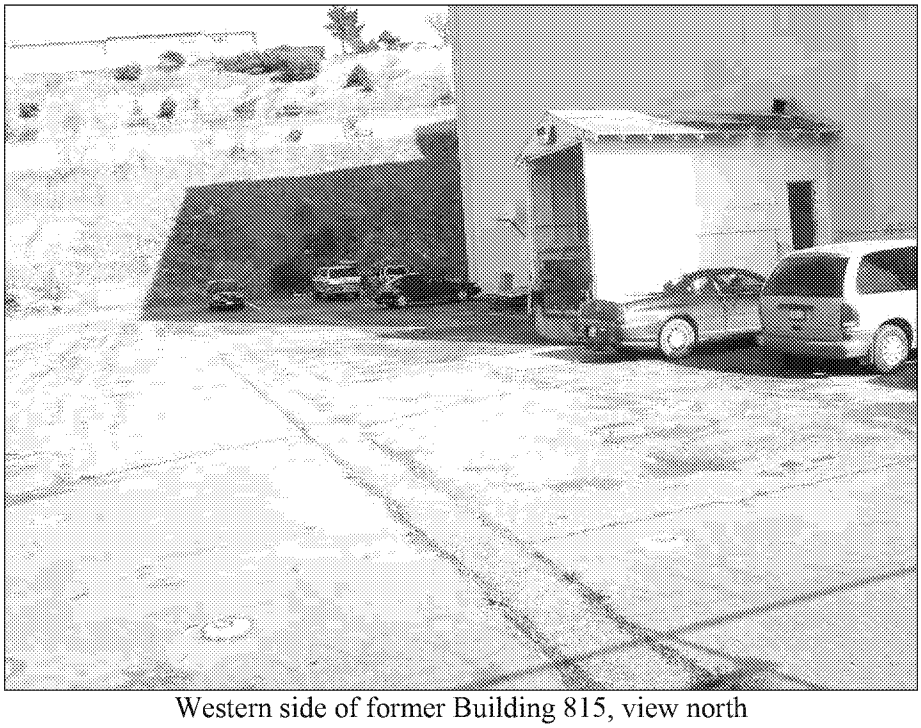
Former Building 820, view southeast



Former Building 815, view east



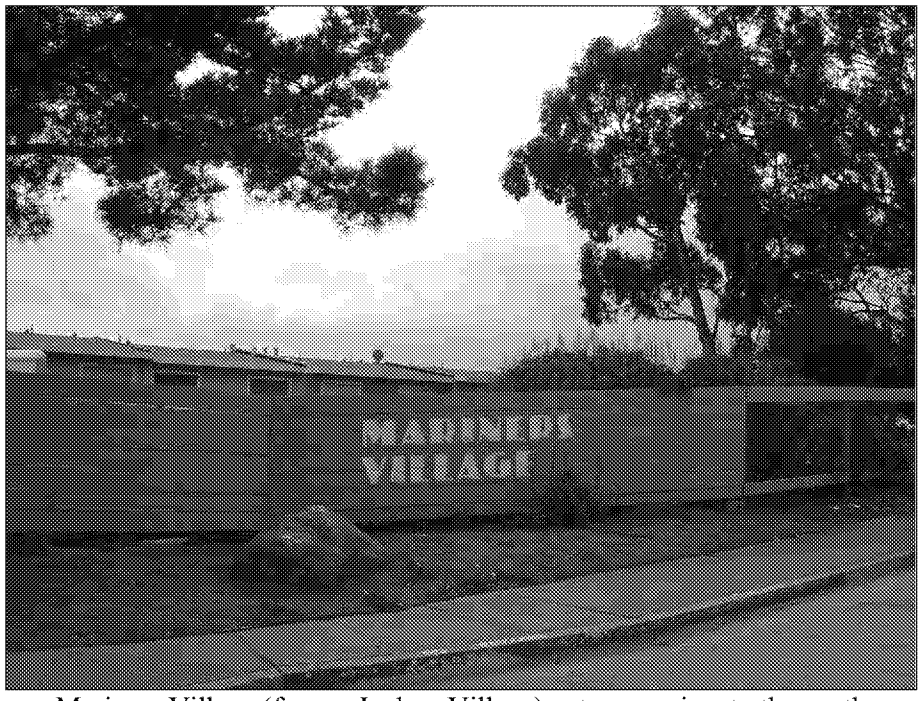
Former Building 815, view east



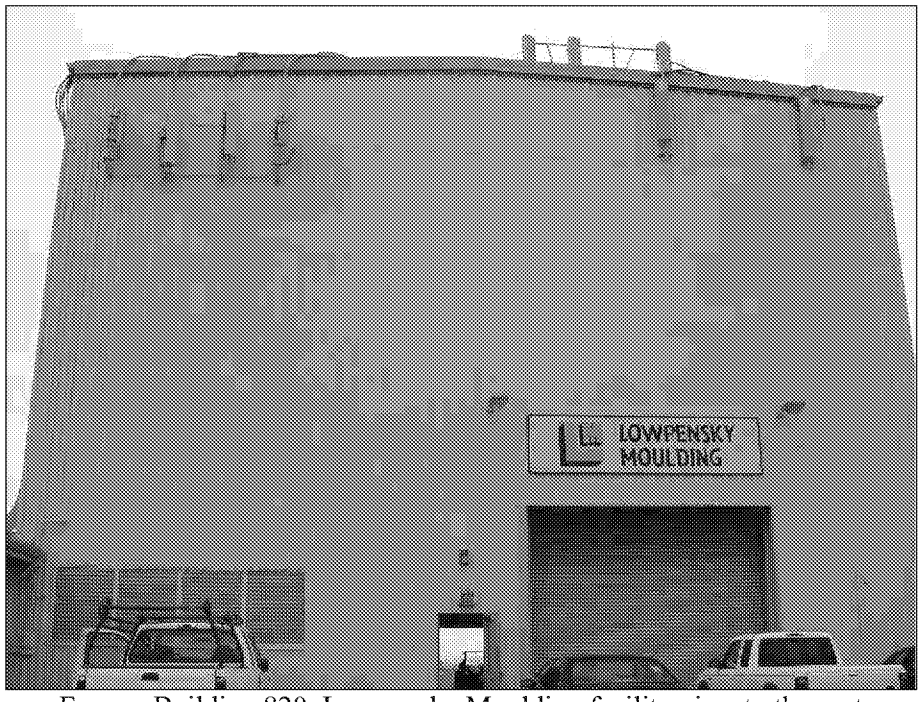
Western side of former Building 815, view north

Former Building 815, view northwest

Eastern side of former Building 815, view north

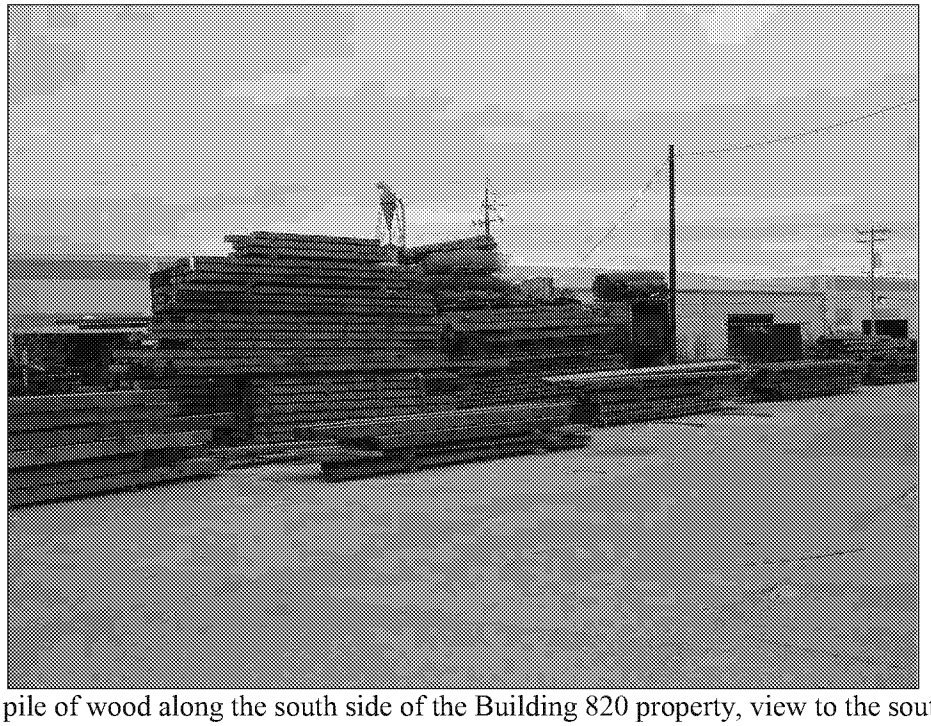


Mariners Village (former Inchon Village) entrance, view to the south



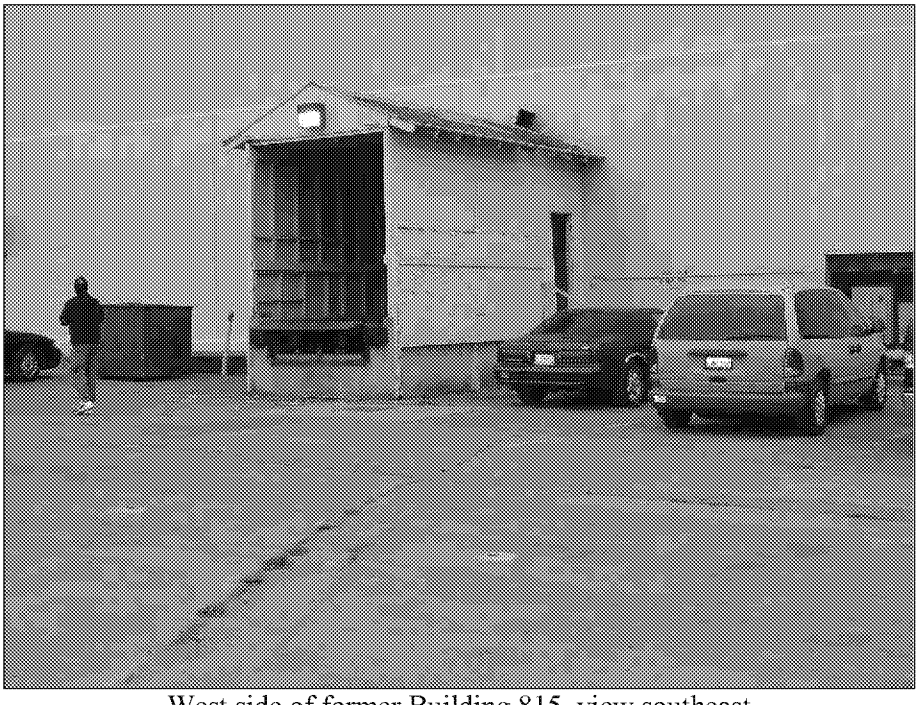
Former Building 820, Lowpensky Moulding facility view to the east

South side of former Building 820, view east

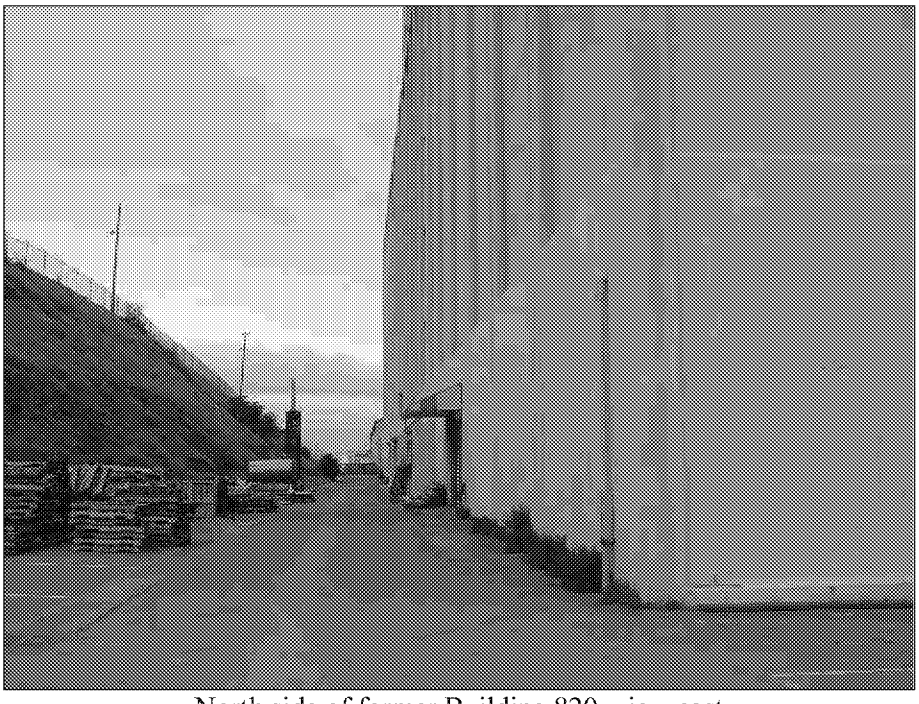


Stock pile of wood along the south side of the Building 820 property, view to the southeast

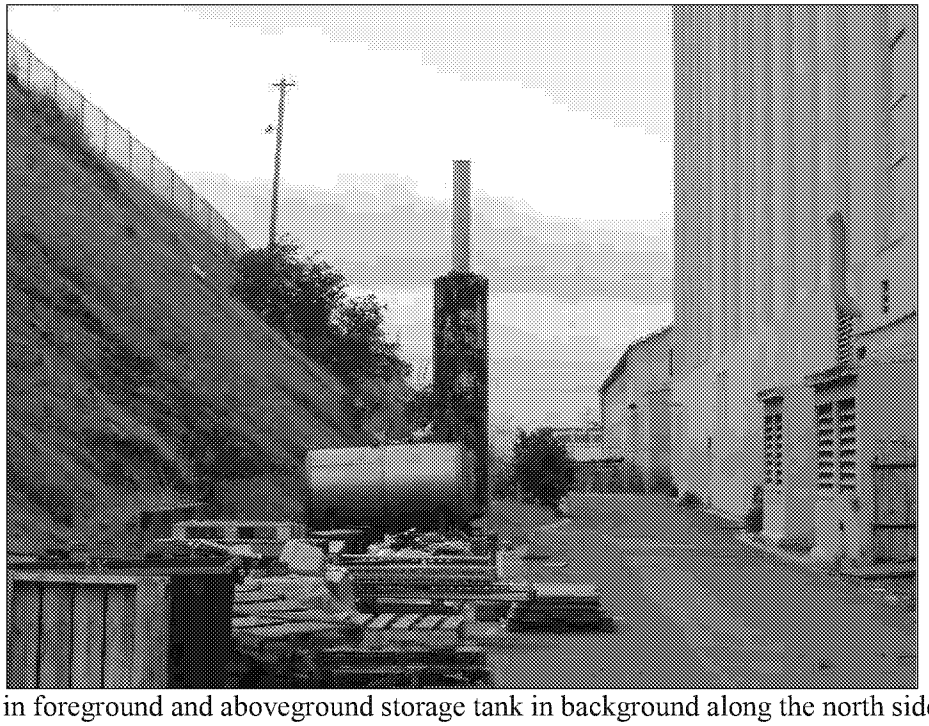
View vertical of the storm water storage area adjacent to former Building 815



West side of former Building 815, view southeast



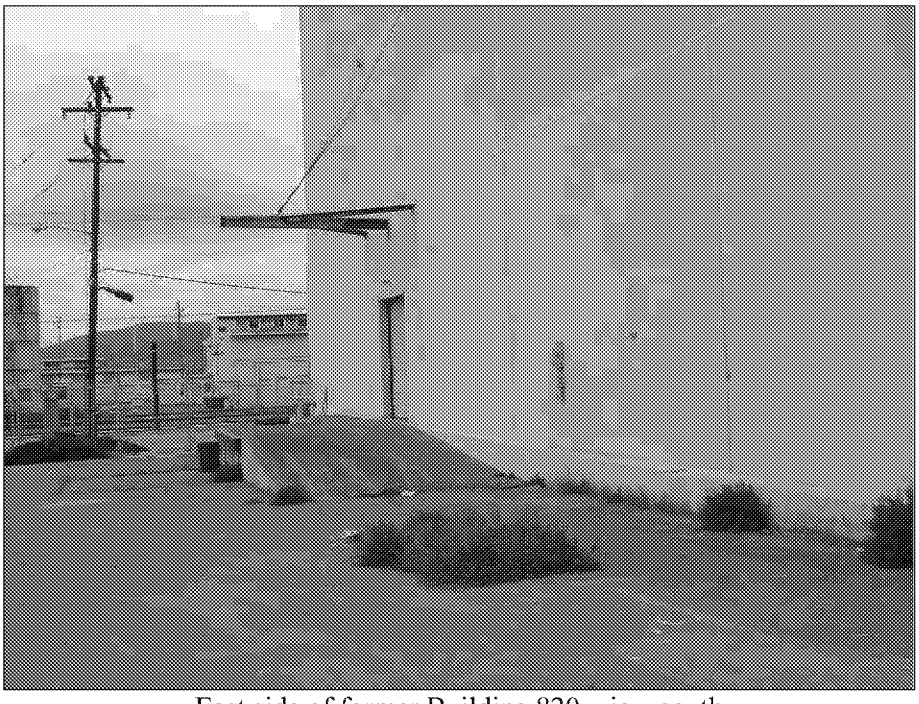
North side of former Building 820, view east



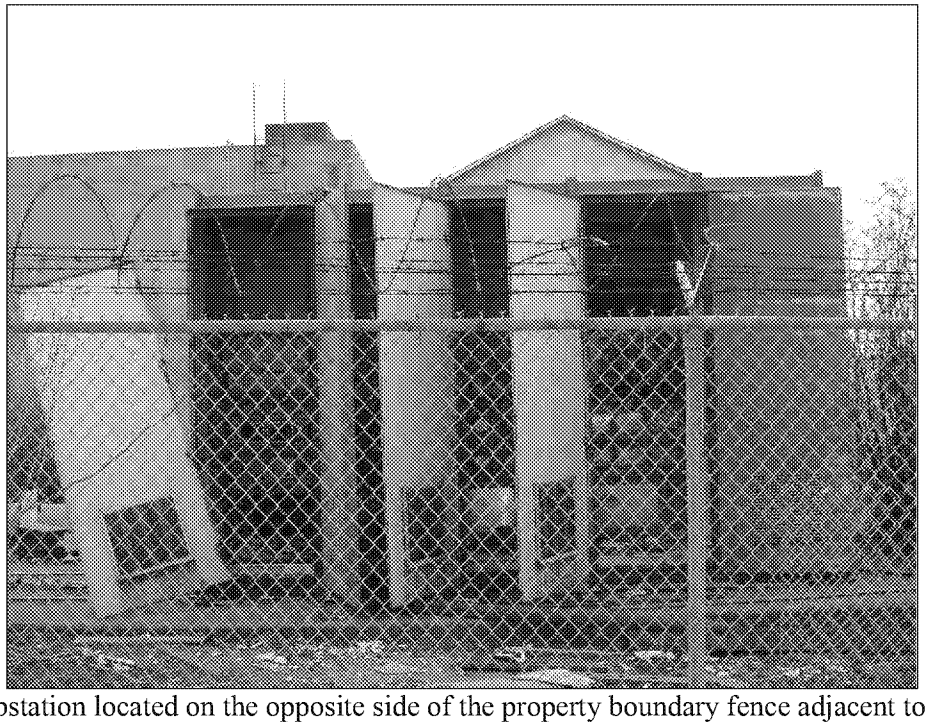
Debris pile in foreground and aboveground storage tank in background along the north side of former Building 820

Former location of underground fuel storage tanks along the northern side of former Building 820, view north

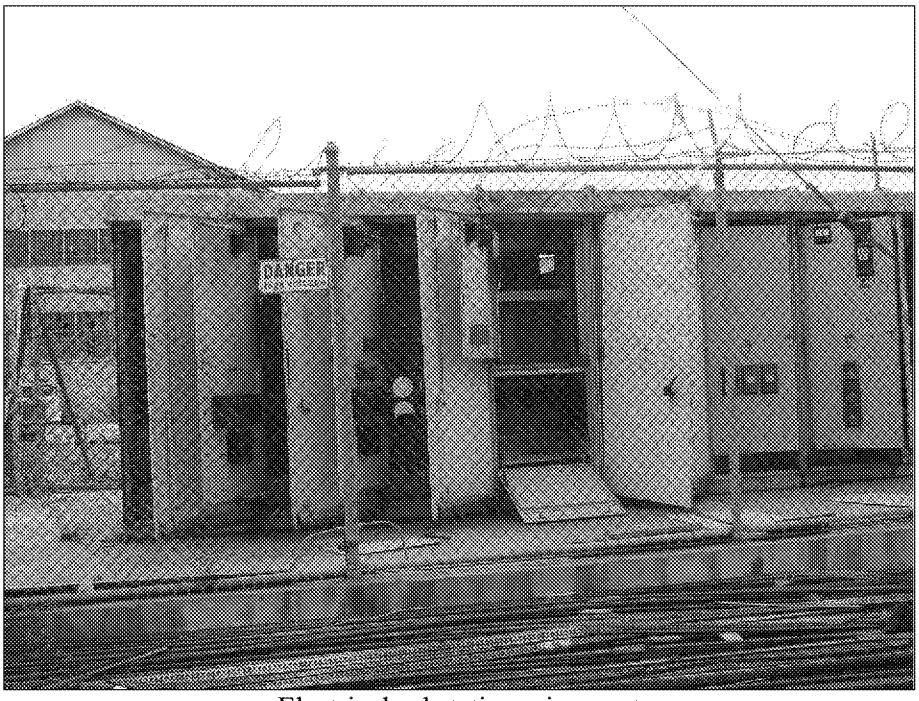
Diesel fuel aboveground storage tank used for back-up power for former Building 820, view north



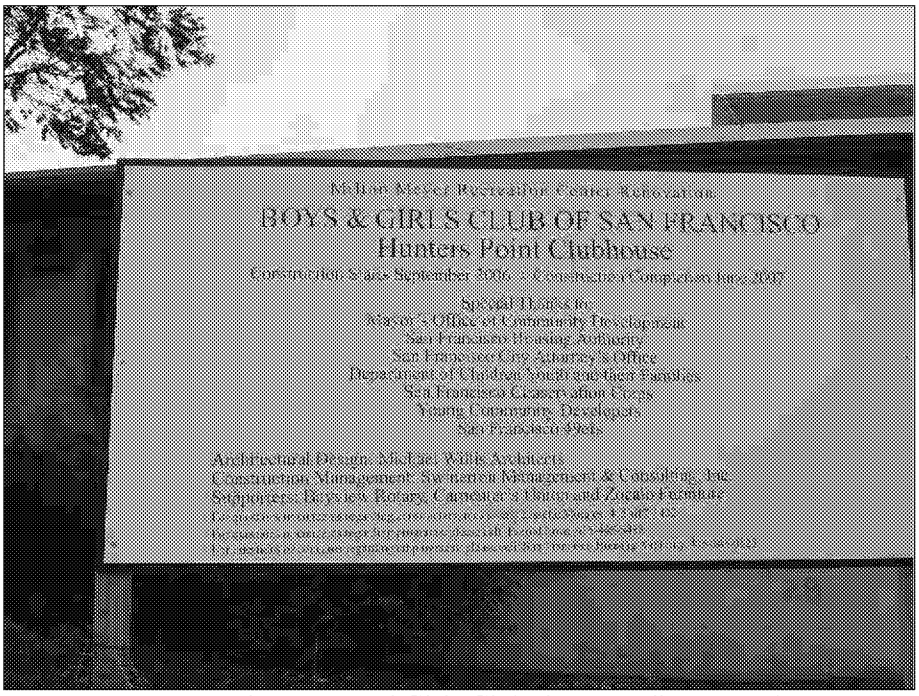
East side of former Building 820, view south



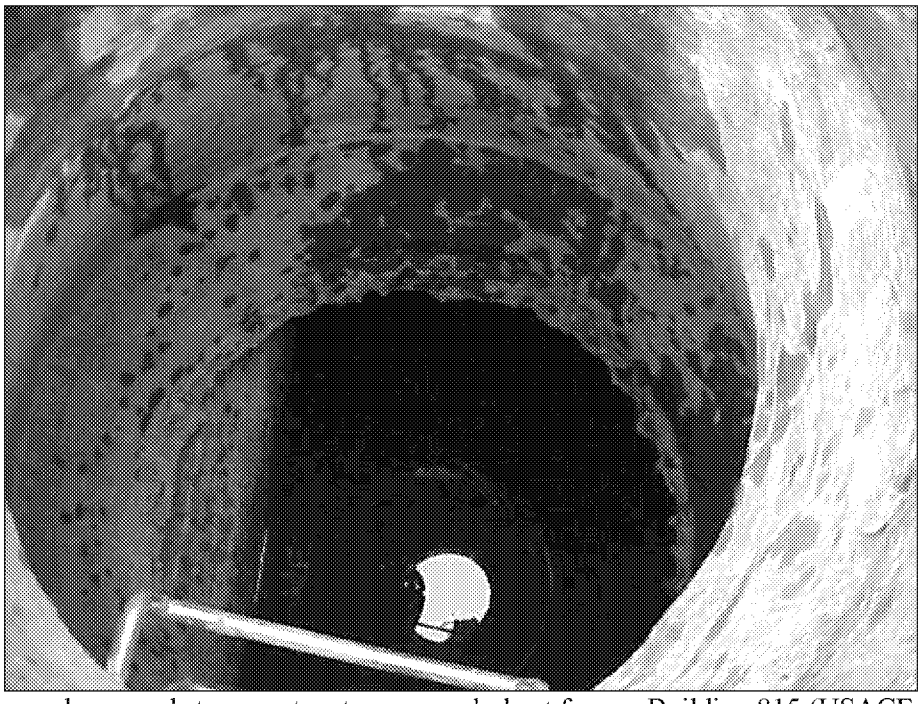
Electrical substation located on the opposite side of the property boundary fence adjacent to the east side of former Building 820, view east



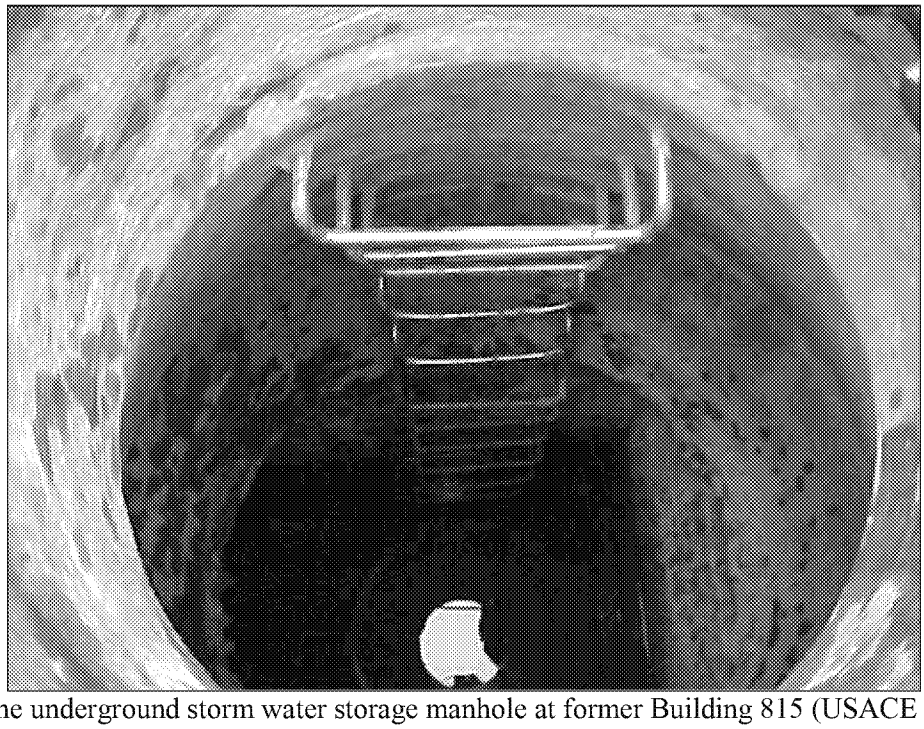
Electrical substation, view east



Hunters Point Boys and Girls Club signage adjacent to the



View into the underground storm water storage manhole at former Building 815 (USACE Site visit 12 May 2003)



View into the underground storm water storage manhole at former Building 815 (USACE Site visit 12 May 2003)

Manhole cover leading into underground storm water storage tanks adjacent to former Building 815 (USACE Site visit 12 May 2003)

Additional access to underground storm water storage tanks adjacent to former Building 815 (USACE Site visit 12 May 2003)

Underground storm water release valves (USACE Site visit 12 May 2003)

Underground storm water pumps (USACE Site visit 12 May 2003)

Underground storm water pumps (USACE Site visit 12 May 2003)

Inside manhole leading to underground storm water storage tanks (USACE Site visit 12 May 2003)

Manhole cover with access grate in background (USACE Site visit 12 May 2003)

View inside manhole (USACE Site visit 12 May 2003)

Manhole and grate leading to underground storm water storage tanks adjacent to former Building 815
(USACE Site visit 12 May 2003)